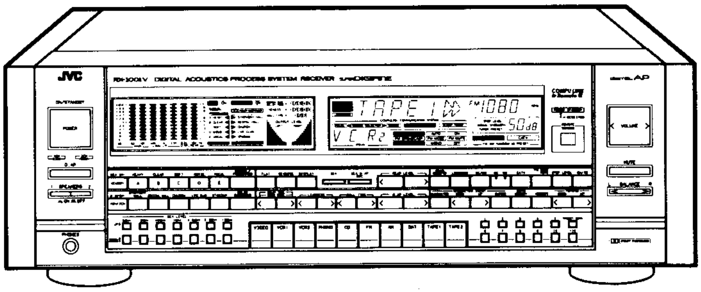
JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. RX-1001VBK



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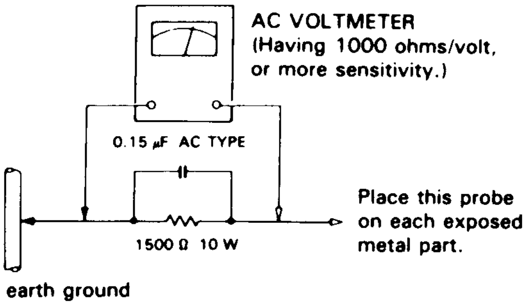
No. 20057
Jun. 1988

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 μF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Specifications

AMPLIFIER SECTION

Output Power

2-Channel Operation : **120 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion**
130 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.2% total harmonic distortion.
125 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003%** total harmonic distortion.

4-Channel Operation : (Front Channels)
110 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion
(Rear Channels)
15 watts per channel, min. RMS, into 8 ohms at 1 kHz, with no more than 0.07%* total harmonic distortion.

Total harmonic distortion : 0.003%** at 125 watts (1 kHz, 8 ohms)
Intermodulation distortion : 0.007% at 120 watts
Damping factor : 45 at 8 ohms, 1 kHz

Input sensitivity/impedance
PHONO (MM) : 2.5 mV/47 kohms
PHONO (MC) : 250 μV/100 ohms
TAPE 1 PLAY, TAPE 2 PLAY, DAT PLAY, CD, VIDEO, VCR 1 PLAY, VCR 2 PLAY : 230 mV/47 kohms

Recording output level : 230 mV

Frequency response
PHONO (RIAA equalization) : 20 Hz – 20 kHz, +0.5 dB, –0.5 dB
TAPE 1 PLAY, TAPE 2 PLAY, DAT PLAY, CD, VIDEO, VCR 1 PLAY, VCR 2 PLAY : 5 Hz – 50 kHz, +0 dB, –1 dB

S.E.A. graphic equalizer
Center frequencies : 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz
Control range : ±10 dB

Signal-to-noise ratio
PHONO(MM) : 80 dB ('66 IHF)
80 dB ('78 IHF)
(Rec out)
TAPE 1 PLAY, TAPE 2 PLAY, DAT PLAY, CD, VIDEO, VCR 1 PLAY, VCR 2 PLAY : 100 dB ('66 IHF)
85 dB ('78 IHF)

FM TUNER SECTION

IHF

Tuning range : 87.5 MHz – 108.0 MHz
Usable sensitivity : Mono 10.3 dBf
0.9 μV/75 ohms
50 dB quieting sensitivity : Mono 14.8 dBf (1.5 μV/75 ohms)
Stereo 38.3 dBf (22.5 μV/75 ohms)
Signal-to-noise ratio (85 dBf) : Mono 84 dB
Stereo 78 dB (A-net)
Total harmonic distortion 1 kHz : Mono 0.08%
Stereo 0.08%
Frequency response : 30 Hz – 15 kHz, +0.5 dB, –0.8 dB
Capture ratio (85 dBf) : 1.5 dB
Alternate channel selectivity : 70 dB, ±400 kHz
Image response ratio : 90 dB at 98 MHz
IF response ratio : 100 dB at 98 MHz
Stereo separation : 50 dB at 1 kHz

AM TUNER SECTION

IHF

Tuning range : 530 kHz – 1,710 kHz
(for U.S.A. and Canada)
522 kHz – 1,629 kHz
530 kHz – 1,630 kHz
Sensitivity : 30 μV*
250 μV/m*
Signal-to-noise ratio : 50 dB* (100 mV/m)
Selectivity : 38 dB, ±10 kHz
Image response ratio : 40 dB*
IF response ratio : 65 dB
Total harmonic distortion : 0.5%* (100 mV/m)

VIDEO SECTION

Output signal level (VCR 1, VCR 2 REC) (MONITOR OUT A, B) : 1 Vp-p (at 1 Vp-p input)
Impedance : 75 ohms unbalanced
Synchronization : Negative
Signal-to-noise ratio : 45 dB
Crosstalk : 45 dB (3.58 MHz)

* Measured at 1,000 kHz or 999 kHz
** Measured by JVC Audio Analysis System.

GENERAL

Dimensions (W x H x D) : 18-3/4 x 6-3/16 x 15-1/8 inches
475 x 156 x 383 mm
Weight : 29.8 lbs. (13.5 kg)

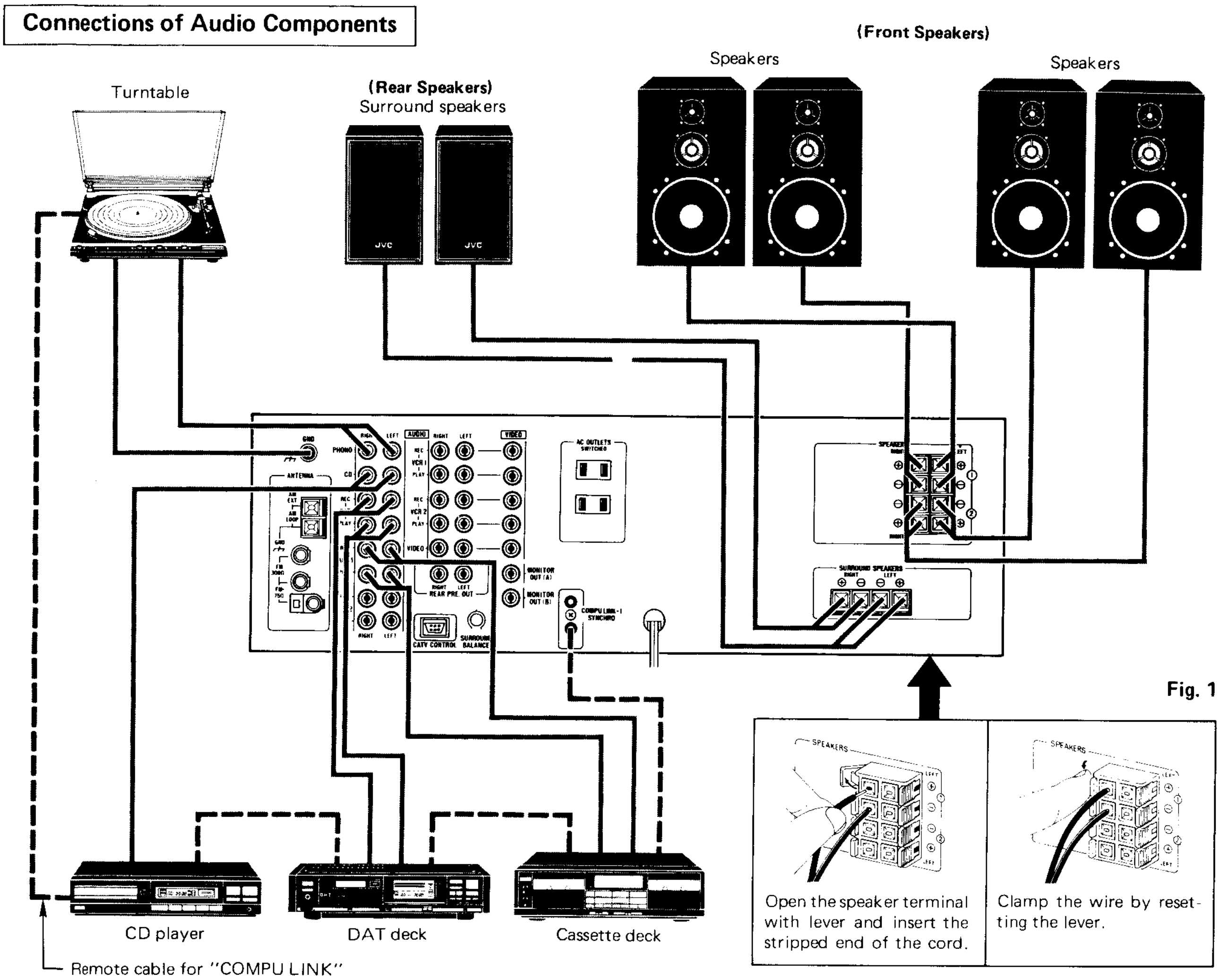
Design and specifications subject to change without notice.

POWER SPECIFICATIONS

Areas	Line Voltage & Frequency	Power Consumption
U.S.A.	AC 120V~,60 Hz	580watts, 690VA
Canada		
Continental Europe	AC 220V~,50 Hz	390watts
U.K.	AC 240V~,50 Hz	790watts
Australia	AC 240V~,50 Hz	390watts
Other areas	AC 110/120/220/240V~selectable. 50/60 Hz	390watts

CONNECTION DIAGRM

Connections of Audio Components

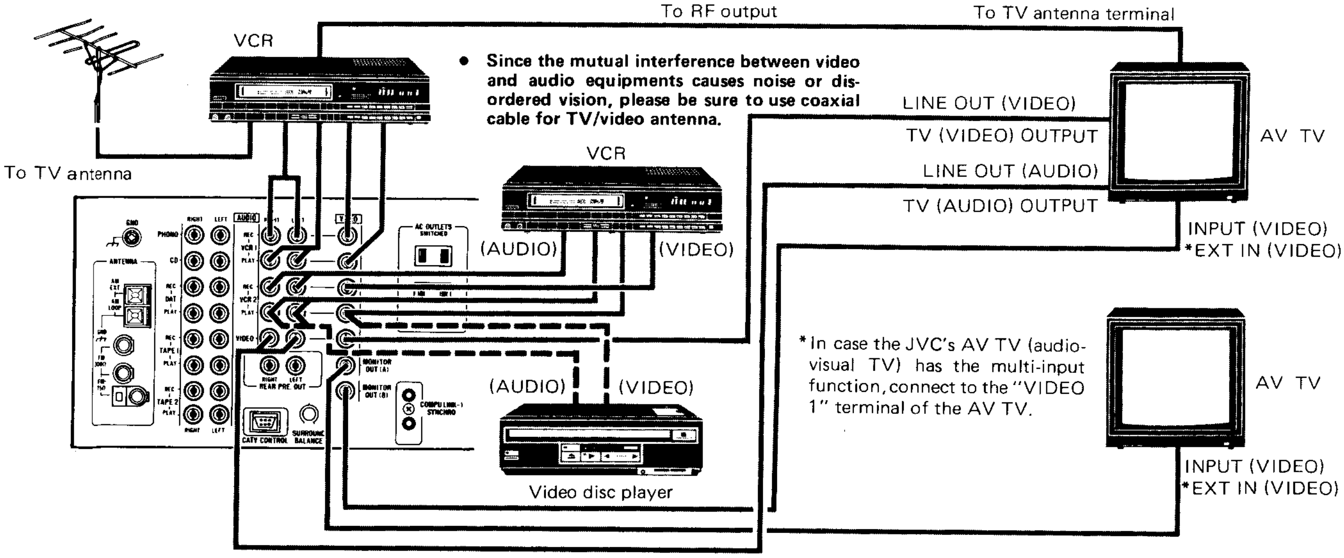

(Front Speakers)
Speakers
Speakers
Turntable
(Rear Speakers)
Surround speakers
JVC
JVC
GND
PHONO
CD
ANTENNA
AUDIO
VIDEO
RIGHT
LEFT
VCR 1
VCR 2
DAT
VIDEO
MONITOR OUT (A)
MONITOR OUT (B)
REAR PRE OUT
CATV CONTROL
SURROUND BALANCE
COMPU LINK-1 SYNCHRO
AC OUTLETS SWITCHED
SPEAKERS
SURROUND SPEAKERS
CD player
DAT deck
Cassette deck
Remote cable for "COMPU LINK"
SPEAKERS
SPEAKERS

Open the speaker terminal with lever and insert the stripped end of the cord.

Clamp the wire by resetting the lever.

Fig. 1

Connections of Video Components


To RF output
To TV antenna terminal
VCR
To TV antenna
LINE OUT (VIDEO)
TV (VIDEO) OUTPUT
LINE OUT (AUDIO)
TV (AUDIO) OUTPUT
AV TV
VCR
(AUDIO)
(VIDEO)
INPUT (VIDEO)
*EXT IN (VIDEO)
(AUDIO)
(VIDEO)
Video disc player
AV TV
INPUT (VIDEO)
*EXT IN (VIDEO)

- **Since the mutual interference between video and audio equipments causes noise or disordered vision, please be sure to use coaxial cable for TV/video antenna.**

*In case the JVC's AV TV (audio-visual TV) has the multi-input function, connect to the "VIDEO 1" terminal of the AV TV.

Fig. 2

REAR PANEL

① External ANTENNA terminals
② GND terminal
③ CATV CONTROL terminal
Connect the optional CATV antenna control unit. For connection, refer to the instruction book of the CATV antenna control unit.

AUDIO : For audio signal connection

④ PHONO terminals
⑤ CD terminals
⑥ DAT REC terminals
⑦ DAT PLAY terminals
⑧ TAPE 1 REC terminals
⑨ TAPE 1 PLAY terminals
⑩ TAPE 2 REC terminals
⑪ TAPE 2 PLAY terminals
⑫ VCR 1 REC terminals
⑬ VCR 1 PLAY terminals
⑭ VCR 2 REC terminals
⑮ VCR 2 PLAY terminals

Note:

- **The AUDIO jacks of the VCR 1 and VCR 2 terminals can also be used with audio equipment.**

⑯ VIDEO terminals
⑰ REAR PRE. OUT termianls
To upgrade the rear speaker sound (to get more power and better sound quality), connect a separate power amplifier to these terminals. In this case, disconnect the rear speakers from the ㉚ SURROUND SPEAKERS terminals of this unit, and reconnect them to the speaker terminals of the rear channel power amplifier.

Note:

- **For connection and operations, refer to the instruction book of the power amplifier.**

VIDEO : For video signal connection

⑱ VCR 1 REC terminal
Connect a VCR's video in terminal to this.
⑲ VCR 1 PLAY terminal
Connect a VCR's video out terminal to this.
⑳ VCR 2 REC terminal
㉑ VCR 2 PLAY terminal
㉒ VIDEO terminals
㉓ MONITOR OUT (A) terminal
Connect the VIDEO MONITOR OUT (A) terminal to an AV TV with a TV OUTPUT terminal or a television provided with a video input terminal, to reproduce video signals.
㉔ MONITOR OUT (B) terminal
Connect any of several JVC-specified TVs or an AV TV with a LINE OUT terminal. No signal is output from this terminal when the VIDEO source is selected.

GENERAL

㉕ SURROUND BALANCE
Set this knob to its center position. Normally it is not necessary to readjust it.
However, if the balance between left and right channels is not appropriate, adjust this so that no sound is heard from the rear speakers when playing back a monaural source in the DOLBY SURROUND mode.
㉖ COMPU LINK-1/SYNCHRO terminals
Connect to units provided with a COMPU LINK-1/SYNCHRO terminals for the COMPU LINK control system function.
㉗ AC OUTLETS (SWITCHED)··· for U.S.A. and Canada
㉘ SPEAKERS 1 terminals
㉙ SPEAKERS 2 terminals
㉚ SURROUND SPEAKERS terminals
㉛ Power cord

NOTES

1. **When connecting components, connect their left and right channels correctly. If channels are reversed, the stereo effect will be degraded.**
2. **Connect speakers with correct polarity: (+) to (+) and (−) to (−). Reversed polarity may degrade the stereo effect.**
3. **Switch the power off when connecting any components.**
4. **Connect plugs and wires firmly. Poor contact may result in hum.**
5. **The AC OUTLETS do not supply power when the power switch is turned off. Do not connect equipment requiring more than the outlet's rated value.**
6. **Keep connection cords as far as possible from the TV.**

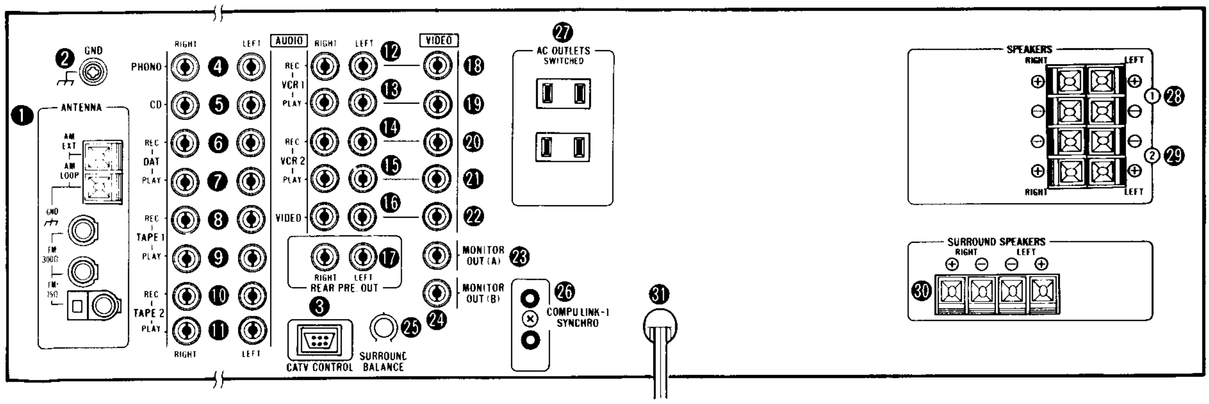

GND
ANTENNA
AM EXT
AM LOOP
GND
FM 300Ω
FM 75Ω
PHONO
CD
REC DAT PLAY
REC TAPE 1 PLAY
REC TAPE 2 PLAY
RIGHT
LEFT
AUDIO
RIGHT
LEFT
REC VCR 1 PLAY
REC VCR 2 PLAY
VIDEO
VIDEO
RIGHT LEFT REAR PRE OUT
MONITOR OUT (A)
MONITOR OUT (B)
CATV CONTROL
SURROUND BALANCE
AC OUTLETS SWITCHED
COMPU LINK-1 SYNCHRO
SPEAKERS
RIGHT
LEFT
SURROUND SPEAKERS
RIGHT
LEFT
1
2
3
4
5
6
7
8
9
10
11
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Fig. 3

ANTENNAS

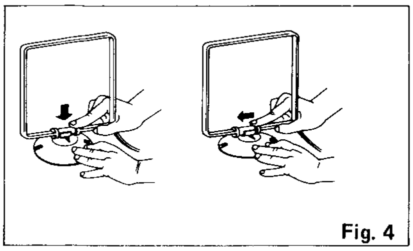


Fig. 4

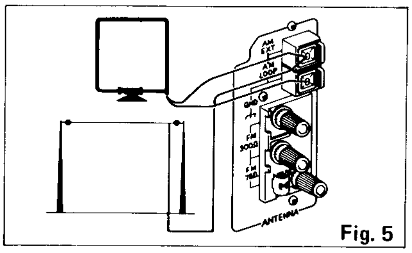

AM EXT
AM LOOP
GND
FM 300Ω
FM 75Ω
ANTENNA

Fig. 5

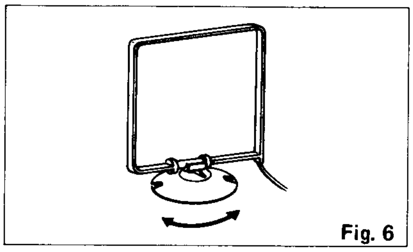


Fig. 6

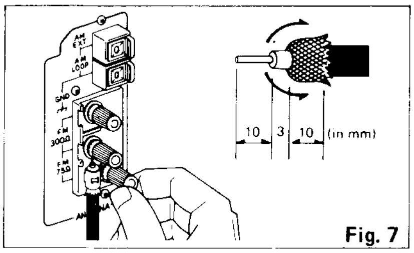

AM EXT
AM LOOP
GND
FM 300Ω
FM 75Ω
10
3
10
(in mm)

Fig. 7

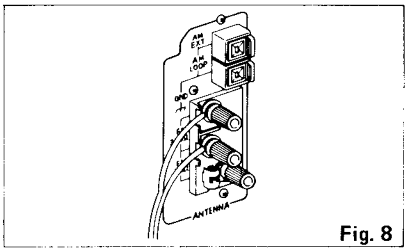

AM EXT
AM LOOP
GND
ANTENNA

Fig. 8

AM antennas

How to fix the loop antenna (Fig. 4)

AM loop antenna (Fig. 5)

This antenna is for the reception of local AM broadcasts.

AM external antenna (Fig. 5)

If AM reception is unsatisfactory, connect an external AM ANTENNA (single-wire antenna) to the AM ANTENNA terminal.

Noise and interference (Fig. 6)

Change the direction of the loop antenna or reinstall it in a better position when reception is noisy.

Notes:

- **If the provided loop antenna is not connected or an uninsulated antenna wire touches the rear panel, it will be impossible to receive AM broadcasts.**
- **When installing an external AM antenna, leave the AM loop antenna connected.**

FM antennas

- **75-ohm antenna with coaxial (Fig. 7)**
  Loosen the screws on the bracket and insert the cable through the ring from below. Connect the stripped core to the upper terminal then tighten the ring. The ring is the antenna ground.
- **Feeder antenna (Fig. 8)**
  Connect to the 300-ohm terminal.
  Make sure that the feeder antenna wires do not touch any other terminals.

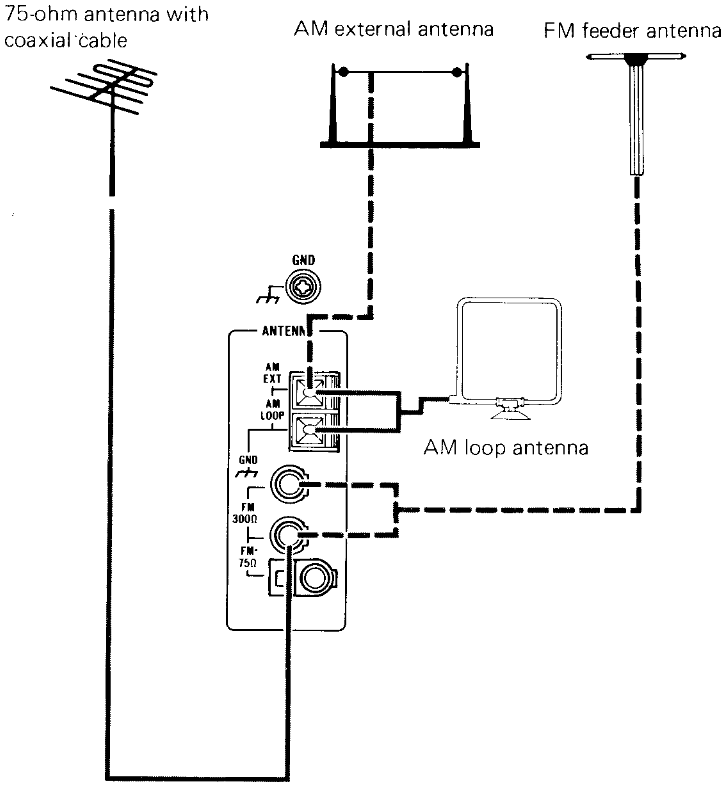
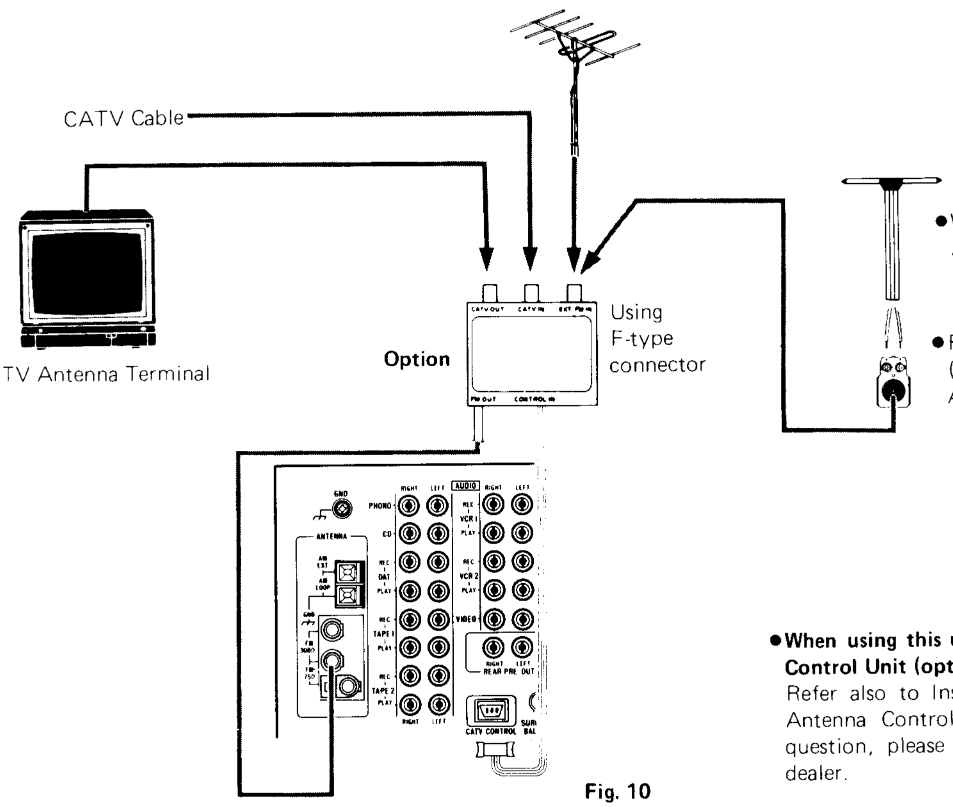

75-ohm antenna with coaxial cable
AM external antenna
FM feeder antenna
GND
ANTENNA
AM EXT
AM LOOP
AM loop antenna
GND
FM 300Ω
FM 75Ω

Fig. 9

USE WITH CATV UNIT (Refer to the Instruction Book of CATV Antenna Control Unit) : for U.S.A. and Canada

Use of CATV Cable


FM External Antenna
CATV Cable
to TV Antenna Terminal
Option
Using F-type connector

- When using an FM Antenna, attach here.
- F-type Converter Plug (provided with the CATV Antenna Control Unit)

- **When using this unit with CATV Antenna Control Unit (optional)**
  Refer also to Instruction Book of CATV Antenna Control Unit. If you have any question, please consult with your JVC dealer.

Fig. 10

When using 2 FM antennas

- The CATV Antenna Control unit can also be used as a switching unit when two FM antennas are used.

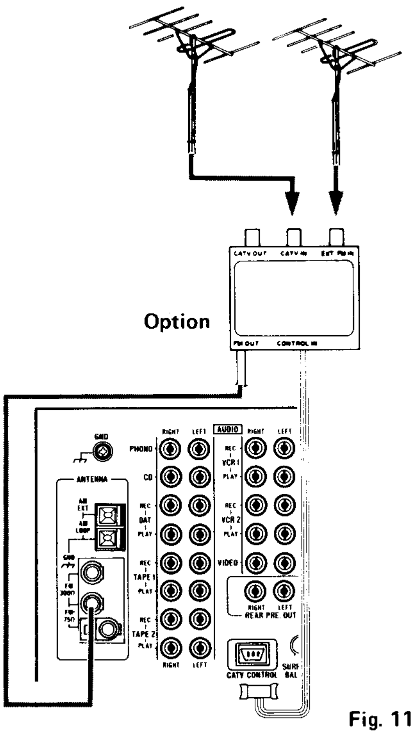

FM external antenna
Option

Fig. 11

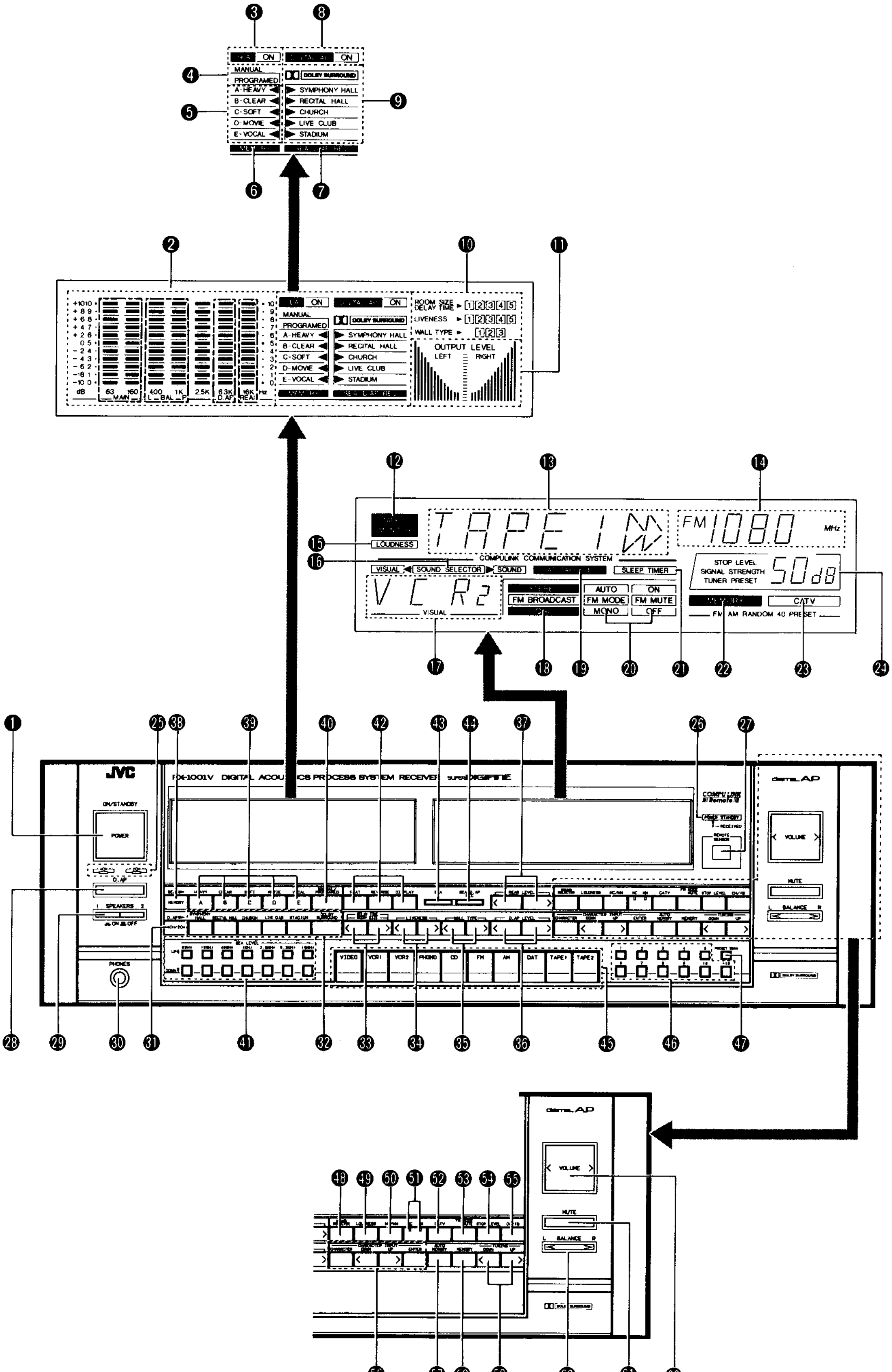

ON
MANUAL
PROGRAMED
A-HEAVY
B-CLEAR
C-SOFT
D-MOVIE
E-VOCAL
DOLBY SURROUND
SYMPHONY HALL
RECITAL HALL
CHURCH
LIVE CLUB
STADIUM
ROOM SIZE
DELAY TIME
LIVENESS
WALL TYPE
OUTPUT LEVEL
LEFT
RIGHT
63
160
400
1K
2.5K
6.3K
16K
Hz
dB
MAIN
BAL
D.AP
REAR
LOUDNESS
TAPE 1
FM 1080
MHz
COMPULINK COMMUNICATION SYSTEM
VISUAL
SOUND SELECTOR
SOUND
SLEEP TIMER
STOP LEVEL
SIGNAL STRENGTH
TUNER PRESET
50 dB
VCR 2
FM BROADCAST
AUTO
FM MODE
MONO
ON
FM MUTE
OFF
CATV
FM/AM RANDOM 40 PRESET
JVC
RX-1001V DIGITAL ACOUSTICS PROCESS SYSTEM RECEIVER
ON/STANDBY
POWER
D.AP
SPEAKERS
PHONES
VOLUME
MUTE
BALANCE
VIDEO
VCR1
VCR2
PHONO
CD
FM
AM
DAT
TAPE1
TAPE2
CHARACTER
ENTER
MEMORY
1
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Fig. 13

FRONT PANEL

Refer to page 8 and keep it open.

❶ POWER

ON: Press to turn the power on. To turn the power off, press again. Even when the power is turned off, the STANDBY indicator remains lit unless the receiver is unplugged from the wall out.

STANDBY: Even when all of the indicators are off, the memory circuit operates and the preset data and the source select data, etc. are not subject to cancellation or accidental alteration as long as the power cord is plugged into an AC outlet. This is called the STANDBY mode. The preset data and the source select data are maintained even in the case of a power failure or when the power cord is disconnected, if the period power is not applied does not exceed a couple of days.

Notes:

- **Even in the STANDBY mode, this receiver consumes a small amount of electricity (2 watts). To shut off the power completely, disconnect the power cord.**
- **POWER STANDBY indicator:**
  Connecting the power plug to the AC wall outlet causes this indicator to light, indicating that the unit has been set to the STANDBY mode.
- **When the power is tuned on, the operation buttons may not work correctly and abnormal indications may appear. If this happens, unplug the power cord from the AC outlet and insert it again.**

❷ S.E.A. indicator and VOLUME/BALANCE indicator

This indicator normally light in the VOLUME/BALANCE mode, showing the volume levels for MAIN and REAR speakers as well as the balance between L-channel and R-channel. When any of the S.E.A. graphic equalizer buttons is operated, it enters the S.E.A. mode for a fixed period, then returns to the VOLUME/BALANCE mode.

To display the S.E.A. mode continuously, press the DISPLAY button. In this mode, operating the VOLUME, REAR LEVEL, D.AP LEVEL or BALANCE control will recall the VOLUME/BALANCE mode for a fixed period. Pressing the DISPLAY button again releases the S.E.A. mode.

S.E.A. mode: The dots rise and fall in response to the pressing of the corresponding SEA LEVEL buttons, showing the S.E.A. level in each frequency band.

MAIN: This is concerned with the VOLUME button, and shows the output level from the "FRONT" or "FRONT + REAR" speakers.

L-BAL-R: This is concerned with the BALANCE button, and shows the balance between the L-channel and R-channel signals.

D.AP: This shows how much of the D.AP (Digital Acoustics Processing) effect has been applied.

REAR: This is concerned with the REAR LEVEL button, and shows the volume level of the rear speakers as a proportion of that of the front speakers.

❸ SEA indicator

The "ON" indicator lights when the SEA button is pressed ON, to show that the S.E.A. graphic equalizer has been activated.

❹ MANUAL/PROGRAMED indicators

Pressing the MANUAL/PROGRAMED button causes "MANUAL" or "PROGRAMED" to light on the display, indicating which mode has been selected.

❺ S.E.A. preset indicators

Pressing the MANUAL/PROGRAMED button will cause one of the "A-HEAVY" to "E-VOCAL" indicator to light, according to which preset pattern was being used the last time the unit was in that particular mode (MANUAL or PROGRAMED). If no preset pattern was being used, no preset pattern indicator will light. These indicators also light when an S.E.A. preset button is pressed, to select a preset pattern or to store a newly-created pattern in memory.

❻ MEMORY indicator

Pressing the MEMORY button lights "MEMORY" for about five seconds, thus indicating the unit is ready to store the pattern you have created.

❼ SEA D.AP REC indicator

This indicator lights when the SEA D.AP REC button is pressed, and the signal to which the S.E.A. and/or D.AP effect is applied will be output from the TAPE1, DAT, VCR1 and VCR2 REC OUT terminals.

This indicator does not light when both the SEA and D.AP buttons are set to off.

❽ DIGITAL AP indicator

The "ON" indicator lights when the D.AP or DOLBY SURROUND mode is engaged.

❾ DOLBY SURROUND and D.AP mode indicators

The signal processing mode selected with the DOLBY SURROUND button or the D.AP mode select buttons is shown by the corresponding indicator.

The DD DOLBY SURROUND indicator lights when the DOLBY SURROUND button is pressed, or an arrow " ▶ " lights when the corresponding D.AP mode selector button is pressed.

❿ ROOM SIZE/DELAY TIME, LIVENESS and WALL TYPE indicators

ROOM SIZE/DELAY TIME: When the DOLBY SURROUND button is pressed, these indicators shows the DELAY TIME setting, and when any of the D.AP mode select buttons is pressed, they show the ROOM SIZE setting.

When the DELAY TIME/ROOM SIZE [>] button is pressed, the indicators light in numerical order from [1] to [5], and when the [<] button is pressed, the indicators light in reverse order, from [5] to [1].

LIVENESS: When the LIVENESS [>] button is pressed, the indicators light in numerical order from [1] to [5], and when the [<] button is pressed, the indicators light in reverse order, from [5] to [1].

WALL TYPE: When the WALL TYPE [>] button is pressed, the indicators light in numerical order from [1] to [3], and when the [<] button is pressed, the indicators light in reverse order, from [3] to [1].

⓫ OUTPUT LEVEL indicator

Displays the volume output level from the speakers and headphones for left and right channels separately.

This indicator has the function of displaying peak levels at a fixed state.

⓬ TAPE 2 MONITOR indicator

This indicator lights when the TAPE 2 button is pressed.

⓭ COMPU LINK COMMUNICATION SYSTEM indicator

This indicator shows one of the following three modes:

(1) When any of the operation buttons on the remote control unit is pressed, the corresponding operation mode will be displayed.

(2) When any of the source selector buttons is pressed, the name of the source corresponding to the button will be displayed.

(3) When the CHARACTER input mode is engaged, any desired "title" can be stored to correspond to the TUNER PRESET number, or "A" to "E" of the S.E.A. MANUAL mode. The title will be displayed when the preset channel or S.E.A. pattern is recalled.

Examples

"FM-1", "AM-2", "TV-3", or "JAZZ1", "ROCK2", etc.

⑭ FM/AM indicator

The "FM" indicator lights during FM broadcast reception, and "AM" lights during AM broadcast reception, while the frequency being received is also displayed.

⑮ LOUDNESS indicator

This indicator lights when the LOUDNESS button has been pressed.

⑯ SOUND SELECTOR indicator

This indicator lights when the SOUND SELECTOR button has been pressed to ON.

⑰ VISUAL indicator

This shows when a video signal has been selected with the VIDEO source selectors, for playback or recording.

⑱ FM BROADCAST STEREO/QSC indicator

STEREO: When an FM stereo broadcast is being received, this indicator lights. When the MODE indicator shows "MONO", the STEREO indicator will not light even if a stereo FM broadcast is being received. In such a case, press the FM MODE/MUTE button so that "AUTO" is shown.

QSC: When the signal strength of an FM stereo broadcast is low, this indicator lights and the QSC (Quieting Slope Control) circuit is switched on to reduce noise.

⑲ DAT/TAPE REC indicator

This indicator lights for about 5-seconds when the DAT (Digital Audio Tape) deck or cassette deck enters the record mode under the control of the remote control unit.

⑳ FM MODE/FM MUTE indicator

These indicators show "AUTO / ON" or "MONO / OFF" according to the setting of the FM MODE/MUTE button.

㉑ SLEEP TIMER indicator

This indicator lights when the SLEEP TIMER is engaged by pressing the SLEEP TIMER key on the remote control unit.

㉒ MEMORY indicator

This indicator lights for about 5-seconds when the MEMORY button is pressed to on, or for one second when a frequency is stored in memory during auto memory operation.

㉓ CATV indicator

This indicator lights when the CATV button is pressed to ON, showing that the receiver is set to receive CATV FM broadcasts.

㉔ STOP LEVEL/SIGNAL STRENGTH/TUNER PRESET indicator

This indicator is used as the dB SIGNAL STRENGTH indicator, the TUNER PRESET indicator showing the channel number of the preset station, and the STOP LEVEL indicator for auto tuning.

This indicator can be switched between the SIGNAL STRENGTH and the TUNER PRESET display modes by pressing the CH/dB button. The STOP LEVEL display is shown by pressing the STOP LEVEL button.

Notes:

- **0 dB corresponds to 1 μV/75 ohms in FM, and 1 μV/m in AM.**
- **The indication is shown in 5 dB steps.**
- **The optimum signal strength is more than 40 dB for FM mode, more than 60 dB for FM stereo, and 70 dB for AM. If the signals is too weak or too strong, this display may not indicate the correct value.**
- **Even if the dB display mode is set by pressing the CH/dB button, the CH indication is displayed and maintained when the station select buttons are pressed. When the TUNING button is pressed, the 0 dB indication is displayed.**
- **If a broadcast is received by preset tuning, and then the CH/dB button is pressed so that the dB indication is displayed before switching the power off, the CH indication will be displayed when the power is switched on again.**

㉕ 4CH/2CH indicators

Either of these indicators lights according to the operation mode set with the 4CH/2CH select button, to show the mode in which the D.AP (Digital Acoustics Processing) operation is applied.

㉖ RECEIVED and POWER STANDBY indicator

This indicator lights when a signal is received from the remote control unit. It remains lit continuously when the POWER button is off, to show that the receiver is in the STANDBY mode.

㉗ REMOTE SENSOR

This window receives signals from the remote control unit. Do not block it.

㉘ D.AP

Press this button so that the DIGITAL AP "ON" indicator lights, when playing a source with the D.AP or DOLBY SURROUND effect. To release the selected mode, press this button again so that the "ON" indicator goes out.

㉙ SPEAKERS

SPEAKERS 1: Press to switch the speakers connected to the SPEAKERS 1 terminals on or off.

SPEAKERS 2: Press to switch the speakers connected to the SPEAKERS 2 terminals on or off.

㉚ PHONES (Headphone jack)

Plug stereo headphones into this jack for private listening and to monitor recording. If you want to listen to sound from the headphones only, press the SPEAKERS buttons to OFF.

The sound heard from headphones is the same as that heard from front speakers.

㉛ 4CH/2CH

Select the D.AP operation mode with this button when the D.AP effect is required.

When this button is pressed, the D.AP mode is alternated between 4-channel operation and 2-channel operation, and the selected mode indicator lights.

4CH: In this mode, the reproduced sound is output from the front and rear speakers.

The D.AP processed sound is added to the normal stereo sound and output from the front speakers, while only the D.AP processed sound is output from the rear speakers.

When DOLBY SURROUND sound is required set to this position.

2CH: In this mode, only the front speakers are required. The normal stereo sound is mixed with the D.AP processed sound and output from the front speakers only.

Note:

- **In the 2CH mode, no sound is output from the rear speakers connected to the SURROUND SPEAKERS terminals.**

㉜ DOLBY SURROUND and D.AP mode selector

When playing the source sound in the DOLBY SURROUND mode or any D.AP mode, first press the D.AP button then select one of the following buttons, as required.

DOLBY SURROUND: Press this button when playing back a program source encoded with Dolby Surround sound. Dynamic and three-dimensional surround sound (as in a movie theater) will be obtained.

- **DOLBY SURROUND***

  Many video programs (video tapes and video discs) available today have a DD DOLBY SURROUND™mark showing that they have been transcribed with the Dolby Stereo soundtrack left as it is. The soundtrack of these movies includes exactly the same surround sound information as the films you see in movie theaters. As the RX-1001VBK incorporates a Dolby Surround decoder circuit, you can get a similar effect to that in a movie theater equipped with Dolby Stereo, in your home. The RX-1001VBK will turn your listening room into a home movie theater.

  * Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents; U.S. numbers 3,632,886, 3,746,792 and 3,959,590.
  "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

> Movie programs, etc. encoded with the Dolby Surround system are produced so that the volume balance between the front channels and the surround channels is set by the producer of the individual movie. For this reason, it is recommended that you do not set the level of the surround channel too high, to obtain a Dolby Surround sound effect which is closer to that intended.

Use any of the following D.AP mode selector buttons when listening to a normal (2-channel) stereo sources.

SYMPHONY HALL: When this button is pressed, the D.AP sound field effect simulating a large concert hall is obtained.

RECITAL HALL: When this button is pressed, the D.AP sound field effect simulating a small concert hall is obtained.

LIVE CLUB: When this button is pressed, the D.AP sound field effect simulating a small jazz club is obtained.

CHURCH: When this button is pressed, the D.AP sound field effect simulating a church is obtained.

STADIUM: When this button is pressed, the D.AP sound field effect simulating an open-air stadium is obtained.

Note:

- **For details of each D.AP mode, refer to the description of the "About the Digital Acoustics Processor (D.AP)" on page 19.**

㉝ DELAY TIME/ROOM SIZE

Adjust the DELAY TIME in the DOLBY SURROUND mode, or the ROOM SIZE in the D.AP mode with these buttons. The indicator corresponding to the selected mode will light. When the [>] button is pressed, the setting is changed in numerical order from [1] to [5], and the [<] button is pressed, it is changed in reverse order, from [5] to [1].

DELAY TIME: Select the delay time which is the most suitable for the surround sound components included in the program source encoded with Dolby Surround system, in your listening room.

As the delay time setting (indicator) advances in numerical order (from [1] to [5]), the selected delay time becomes longer.

When the distance between the listener and the front speakers is almost the same as that between the listener and the rear speakers, set it to the [3] position.

When the rear speakers are placed relatively far away from the listening position, set the delay time to a shorter setting than [3], and when they are placed relatively close to the listening position, set it slightly longer than [3].

After setting the delay time, to the normal [3] position, say, it is recommended to experiment to find the most effective position while actually listening to the program source.

ROOM SIZE: This adjusts to the size of the room where the original recording was made, etc. in five steps. The room size and therefore the sound field will become wider when the setting indicator is changed in numerical order from [1] to [5].

㉞ LIVENESS

This adjusts the amount of reverberations in five steps. When the [>] buttons is pressed repeatedly, the amount of reverberation becomes greater from [1] to [5], and when the [<] button is pressed repeatedly, the amount of reverberation becomes less in descending order.

Note:

- **If this button is pressed in the DOLBY SURROUND mode, it has no effect.**

㉟ WALL TYPE

This adjusts for different walls and ceiling materials where the original recording was made, in three steps. When the [>] buttons is pressed, the material type of walls and ceiling seems to become harder in the order from [1] to [3], and when the [<] button is pressed, the material of walls and ceiling seems to become softer in the order from [3] to [1].

Note:

- **If this button is pressed in the DOLBY SURROUND mode, it has no effect.**

㊱ D.AP LEVEL

In the D.AP mode, adjust the amount of D.AP enhancement effect to be mixed with the normal stereo sound for the front speakers with these buttons.

When in case of the 4-channel mode, the sound level of the

rear speakers can be adjusted.
Press the [>] button to increase the level and press the [<] button to decrease it. The current level setting is displayed in the D.AP level indicator.

Notes:

- **In the DOLBY SURROUND mode, these button do not effect reproduced sound.**
- **When the D.AP LEVEL is set to the lowest level in the D.AP mode, no sound will come from the rear speakers.**

㊲ REAR LEVEL
Adjust the volume level of the rear speakers relative to the front speakers with these buttons. Press the [>] button to increase the relative volume level and press the [<] button to decrease it.

㊳ MEMORY (S.E.A.)
Press this button and the MEMORY indicator will light for about five seconds. While it is lit, press one of the S.E.A. preset buttons to store the S.E.A. pattern in memory currently being displayed.

㊴ S.E.A. preset
Press to store the displayed S.E.A. pattern in memory or to recall the preset S.E.A. pattern corresponding to each of the "A" to "E" buttons. While in the MANUAL mode, pressing the MEMORY button and then one of these five buttons will store the pattern you have created. Later, while in MANUAL mode, that pattern can be recalled by pressing the appropriate S.E.A. preset button. Up to five original patterns can be stored in memory, to be recalled in this way.
A different set of S.E.A. patterns is available in the PROGRAMED mode. These five patterns (HEAVY, CLEAR, SOFT, MOVIE and VOCAL) have been permanently stored in memory before the unit was shipped, and cannot be replaced. So, up to 10 patterns may be recalled. For more details, refer to page 35.

㊵ MANUAL/PROGRAMED
Press to switch between the MANUAL and PROGRAMED S.E.A. pattern modes.

㊶ SEA LEVEL
The built-in graphic equalizer divides the audio spectrum into seven frequency bands with center frequencies from 63 Hz to 16 kHz at intervals of 4/3 octave.
When the S.E.A. level is set to "0" (center position), the frequency response is flat. The response in each band can be varied by ±10 dB by pressing the UP or DOWN SEA LEVEL buttons.
Buttons for different frequency bands can be pressed at the same time, and holding them down causes the level to rise or fall continuously.
63 Hz: Raise to emphasize the very low base response of organs, drums, and contrabass. When used for emphasis, it produces stable and solid sound; when de-emphasized, eliminates unclear response at low frequencies.
160 Hz: Emphasize to obtain a more expanded low sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.
400 Hz: This frequency range is the base on which music is constructed. Emphasize to put real punch in your music.
1 kHz: Most effective in emphasizing or de-emphasizing the human voice. Emphasize to cause the vocalist to be brought to the foreground, or de-emphasized to fade into the background.
2.5 kHz: The human hearing is most sensitive to this frequency. If the music sounds hard or metallic, de-emphasize it.
6.3 kHz: Boost to add clarity to winds and strings. This frequency band varies the tonal expression, influencing the subtleties of the music.
16 kHz: Boosting this frequency range suitably adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension. This frequency band can also be used to compensate for cartridge response since most moving-magnet cartridges have resonance peaks in the frequency range from 10 kHz to 20 kHz.

㊷ S.E.A. selector
FLAT: Press this button for a flat response.
REVERSE: Press this button to reverse the characteristics of the pattern.
DISPLAY: Press this button to display the S.E.A. graphic equalizer on the display. To restore the VOLUME/BALANCE display, press this button again.

Note:

- **If you press the FLAT or REVERSE button only one time when the display is in the VOLUME/BALANCE mode, it will only change the display mode and not the effect. To change the effect, press the FLAT or REVERSE button twice consecutively.**

㊸ SEA
Press this button for S.E.A. compensation so that "ON" lights in the SEA indicator.
When S.E.A. graphic equalizer is not used, press this button again so that the "ON" indicator goes out.

㊹ SEA D.AP REC
When recording S.E.A. compensated sound, D.AP effected sound or in the S.E.A. + D.AP mode, press this button so that the "SEA D.AP REC"indicator lights.
The effected sound will be output to the TAPE1, DAT, VCR1 and VCR2 REC OUT terminals.
When S.E.A. or D.AP recording is not required, press this button again so that the "SEA D.AP REC" indicator goes out.

Notes:

- **The SEA D.AP REC button does not function when both the SEA button and D.AP button are set to OFF.**
- **S.E.A./D.AP recording is impossible with the tape deck connected to the TAPE 2 terminals.**
- **S.E.A.-compensated sound is not available to the TAPE 2 REC, SURROUND SPEAKERS and REAR PRE. OUT terminals.**

㊺ Source select
VIDEO: Press this button to watch the source from the video component connected to the VIDEO terminals.
VCR 1: Press this button to watch the source from the VCR connected to the VCR1 terminals.
VCR 2: Press this button to watch the source from the VCR connected to the VCR2 terminals.
PHONO: Press to listen to a turntable connected to the PHONO terminals.
CD: Press this button to listen to a compact disc player connected to the CD terminals.
FM: Press this button to listen to an FM broadcast.

AM: Press this button to listen to an AM broadcast.
DAT: Press this button to listen to a DAT deck connected to the DAT terminals.
TAPE 1: Press to listen to a tape deck connected to the TAPE 1 terminals.
TAPE 2: Press to listen to a tape deck connected to the TAPE 2 terminals. Press this button again to release this function and hear the source selected by another source select button.

Note:

- **When a 3-head tape deck is connected to the TAPE 1 and TAPE 2 terminals, monitoring the sound that has just been recorded on the tape is possible. However, when monitoring the TAPE 1 deck, be careful of the following:**
  - *** S.E.A./D.AP recording is impossible.**
  - *** Tape dubbing from TAPE 2 to TAPE 1 is impossible.**

  To release tape monitoring, press the source select button being used for recording.

㊻ TUNER 10-KEY (1 to 10, +10)

Up to 40 FM and AM broadcast frequencies can be preset in this receiver's memory. After presetting, select the desired channel by inputting the preset channel number with these buttons. When selecting preset channel "1" to "10", just press the corresponding numeric button. When selecting preset channels "11" or above, first press the +10 button the required number of times, then press a button from 1 to 10.

For example, to select preset channel "35", first press the +10 key three times, then press 5. Or, to select preset channel "40", press +10 key three times then 10.

When the desired preset channel is recalled, the display shows the preset channel number and its frequency.

㊼ PRESET SCAN

This lets you scan preset channels to find a broadcast you want to listen to. When the PRESET SCAN button is pressed, preset scanning starts. If you have tuned to the current station using the 10-KEY keypad, the tuner scan to the next higher preset channel and the broadcast is received for about 4-seconds with the preset channel number blinking. It then tunes to higher preset channels in sequence. When it reaches the top preset channel, it goes to the bottom channel and scans.up until it reaches the original channel, at which point it stops.

If you have tuned to the current station in any other way, scanning will start from preset channel 1 and finish after preset channel 40 has been received, then the broadcast being received before preset scanning was started will be heard again. When you hear a broadcast you want to listen to, press the PRESET SCAN button again to stop preset scanning.

㊽ SOUND SELECTOR

When this button is pressed (the SOUND SELECTOR indicator lights), the sound signal can be selected from a different AUDIO source in combination with the VISUAL signal originating from the VIDEO source.

㊾ LOUDNESS

Press this button to compensate for the ear's lower sensitivity at low listening levels.

㊿ MC/MM

Select the type of the cartridge used in your turntable with this button. Pressing this button alternates the cartridge mode between MC and MM, and the selected mode indicator lights.
MC: Set to this mode when a using MC cartridge having an output voltage of less than 0.5 mV.
MM: Set to this mode when using a MM cartridge or a MC cartridge having an output of 0.5 mV or higher.

(51) MC/MM indicator

Either the MC or MM indicator lights to show the currently selected cartridge mode set by pressing the MC/MM button.

(52) CATV

Use this button when a separate CATV Antenna Control Unit is connected. When a CATV cable is connected for the reception of CATV programs or if the FM antenna is connected to "CATV IN" of the CATV Antenna Control Unit for the reception of FM broadcasts, push this button so that the CATV indicator lights. Even when the CATV indicator is not lit, you can listen to broadcasts received by the antenna connected to the EXT. FM IN terminal of the CATV antenna control unit. The CATV button functions can also be stored in preset memories together with frequencies.

(53) FM MODE/MUTE

For normal FM reception, for the automatic elimination of interstation noise, press this button so that FM MODE "AUTO" and FM MUTE "ON" light in the display.

When receiving a weak or noisy FM stereo broadcast, press this button so that FM MODE "MONO" and FM MUTE "OFF" light; the broadcast will be heard in mono but reception will be clearer.

(54) STOP LEVEL

This is used to set the strength of broadcast signals at which scan tuning stops in 5 dB steps, for 30 – 50 dB in FM, and 60 – 80 dB in AM.

Note:

- **0 dB corresponds to 1 μV/75 ohms in FM and 1 μV/m in AM.**

(55) CH/dB

Press to select either the channel indication or dB indication.

If one of the station select buttons is not pressed first, only the dB indication is shown and this button has no effect.

(56) CHARACTER INPUT

These buttons are used when storing a broadcast station name for TUNER PRESET channels, or when storing titles for the S.E.A. MANUAL mode in memory. The stored title will be shown in the display when the corresponding channel or pattern is selected.

Select the desired TUNER PRESET channel or required S.E.A. MANUAL pattern from "A" to "E" in which the title is to be input, beforehand.

CHARACTER: Press this button to enter the CHARACTER input mode. When storing the broadcast station name into a TUNER PRESET channel, first recall the desired PRESET channel number using the 10-KEY keypad, then press this button. When storing the title of an S.E.A. MANUAL preset pattern, press the required button (from A to E) then press this button.

DOWN (<)/UP (>): Select the required character, number or symbol to be input by pressing DOWN or UP button. After the required alphanumeric character is displayed, press the CHARACTER button again to move to the next character. By repeating this procedure, input the station name or title as required. Titles can be up to five alphanumeric characters long.

ENTER: After completing the title, press this button to store it in memory.

(57) AUTO MEMORY

After setting the stop level using the STOP LEVEL button, press this button and then any of the TUNER 10-KEY buttons to scan and preset broadcasts automatically. Starting from the frequency being displayed, the tuner tunes to increasingly higher frequencies, until a broadcasts is tuned in. Its signal strength is then shown in dB for one second and the channel number you have pressed earlier flickers for three seconds. If you don't wish to store this station in memory, press this button within 4 seconds; the dB indication is shown and the scan function starts again. Otherwise, the MEMORY indicator and channel number light together and the frequency is stored in that channel. Then the next channel number is shown and up-scanning restarts, as the tuner automatically searches for a frequency to store in the next channel. This process continues until the highest numbered channel preset stations has a frequency stored in its memory.

If the upper limit of the frequency band is reached before this happens, the upper limit of the frequency is shown with dB displayed instead of the channel number.

Otherwise, when this process ends, the last frequency tuned to and its corresponding channel number are displayed. If, while this operation is taking place within a particular broadcast band, that same broadcast band button is pressed, the operation stops and the broadcast currently being tuned to is heard. If a different broadcast band button is pressed, the operation stops and the broadcast last tuned to when that band was listened to is heard.

Note:

- **To cancel the auto memory function, press any of the buttons in the tuner section other than the AUTO MEMORY button.**

(58) MEMORY

Press this button, and the MEMORY indicator will light to show that it is ready to receive a memory setting. Pressing the station select button while the MEMORY indicator is lit (for about 5-seconds) stores the station in the specified memory. At this time, the channel number is shown in the display.

(59) TUNING DOWN/UP

DOWN (<): Press this button to tune to a lower frequency.

UP (>): Press this button to tune to a higher frequency. Holding either button pressed for more than 1 second and then releasing it starts auto tuning. When a broadcast is received, tuning will stop. If either button is held down, scanning continued even when a broadcast is received. In auto tuning, pressing either button stops scanning. When tuning toward higher frequencies, if the upper limit frequency is reached, the frequency will change to the lower limit and then auto tuning restarts in the direction of increasing frequency. When tuning toward lower frequencies, if the lower limit is reached, the frequency will change to the upper limit and auto tuning restarts in the direction of lower frequencies. The same operation is also performed in AM tuning.

Each time these buttons are tapped, the FM frequency will change in 100 kHz steps, and the AM frequency in 10 kHz steps.

(60) BALANCE (L/R)

This control is used to adjust the balance between the left and right speakers. Tap the L side to shift the balance to the left by one step and the R side to shift to the right. Holding the button pressed changes the balance continuously. The BALANCE indicator in the display shows the current balance setting.

(61) MUTE

When this button is pressed, the ⑬ COMPU LINK COMMUNICATION SYSTEM indicator displays "MUTE", and the sound will be muted instantaneously. To return the volume to its original level, press this button again, or press the BALANCE or VOLUME button.

(62) VOLUME (UP/DOWN)

Adjust the volume of speakers or headphones with this button. Press the > (up) side once to increase the volume by one step, and the < (down) side once to decrease it by one step; this level is shown by the VOLUME indicator. Holding down either side of this button will cause the volume to rise or fall continuously.

OPERATION

Before use

Connect each component correctly, and then plug the power cord into an AC wall outlet.

Basic operation

1. Press the POWER button to on.
2. Select the speaker system with the SPEAKER buttons.
3. Proceed through the steps described below, as required.
4. Adjust the volume and the balance to your requirement.
5. Use the SEA buttons to obtain the tone you want to hear.
6. When the DOLBY SURROUND sound effect or a D.AP sound field effect is required, press the D.AP and other required buttons. (Refer to page 17.)

Presetting to selected stations (FM, AM or CATV)

There are two ways to preset stations using the TUNING buttons; **A. AUTO TUNING/MANUAL TUNING, B. AUTO MEMORY FUNCTION.**

A. — How to operate AUTO TUNING/MANUAL TUNING —

(Refer to (59) TUNING DOWN/UP buttons.)

1. Press the FM or AM button.
   When tuning to a CATV FM broadcast, press the FM button, then the CATV button.
2. Tune to a station by pressing the TUNING button for auto tuning or tapping it for manual tuning.
3. Press the MEMORY button so that the MEMORY indicator lights.
4. Press any of the TUNER 10-KEY buttons to be stored in memory as the preset channel number.
5. Perform the same pre-tuning procedure (steps 2, 3, 4) for the remaining channels.
   Up to 40 stations can be preset for FM and AM stations in total.

B. — How to operate the AUTO MEMORY FUNCTION —

(Refer to (57) AUTO MEMORY button.)

1. Press the FM or AM button.
   When tuning to a CATV FM broadcast, press the FM button, then the CATV button.
2. Display the frequency from which scanning is to start using the TUNING button.
3. Press the AUTO MEMORY button and then TUNER 10-KEY button.
   The MEMORY indicator flickers and auto scanning starts from the displayed frequency, upward. When a broadcast is tuned in, its signal strength is shown in dB for one second and the channel number you have pressed earlier flickers for three seconds. If you do not press the AUTO MEMORY button, the MEMORY indicator and channel number light together and the frequency is stored in that channel. Then the next channel number is shown again and scanning up restarts, searching the frequency to store in the next channel. This process continues until the channel preset station with the highest number has a frequency in its memory or auto scanning reaches the highest frequency.

Listening to broadcasts

1. Press the FM or AM button.
2. Select the desired preset channel by pressing the TUNER 10-KEY buttons. The channel number corresponding to the buttons pressed is shown in the display.

Notes:

- **When FM broadcast signals are too weak to be received, press the FM MODE/MUTE button to show "MONO/OFF".**
- **For the reception of AM broadcasts, set the loop antenna to the position where reception is best.**
- **Before listening to broadcasts, first preset the stations correctly; if they are not pre-tuning accurately, reception will be noisy.**

Listening to records

1. Press the PHONO button so that "PHONO" is displayed in the COMPU LINK COMMUNICATION SYSTEM indicator.
2. Set the MC/MM button of this unit according to the cartridge in use.
3. Operate the turntable as described in its operation manual.

Note:

- **If your turntable has a separate ground lead, connect it to the GND terminal.**

Listening to CD

1. Press the CD button so that the "CD" is displayed in the COMPU LINK COMMUNICATION SYSTEM indicator.
2. Operate the CD player as described in its operation manual.

Listening to DAT

1. Press the DAT button so that "DAT" is displayed in the COMPU LINK COMMUNICATION SYSTEM indicator.
2. Operate the DAT deck as described in its operation manual.

Listening to tapes

1. Press the TAPE 1 or 2 button so that "TAPE 1" is displayed in the COMPU LINK COMMUNICATION SYSTEM indicator or "TAPE 2 MONITOR" indicator lights.
2. Operate the tape deck for playback as described in its operation manual.

Watching and listening to VIDEO

1. Press the VIDEO button so that the COMPU LINK COMMUNICATION SYSTEM and VISUAL indicators light and show "VIDEO".
2. Operate the video unit as described in its operation manual.

Note:

- **Connect the video and audio signal cords of the video unit to the AUDIO and VIDEO terminals of this unit. It is also possible to connected audio sources to these terminals, in which case the video terminals are not connected.**

When the SOUND SELECTOR function is used

Refer to ㊽ SOUND SELECTOR button in the "FRONT PANEL" section.

1. Press the VIDEO, VCR1 or VCR2 button; the corresponding COMPU LINK COMMUNICATION SYSTEM and VISUAL indicators will light in the display. (Fig. 14)
2. Operate the video unit as described in its operation manual. With this setting, the SOUND and VISUAL signals input via the VIDEO, VCR1 or VCR2 terminals are output.
3. Press the SOUND SELECTOR button so that the "SOUND SELECTOR" indicator lights.
4. Press the desired AUDIO source selector button (PHONO, CD, FM, AM, DAT, TAPE 1, TAPE 2). (Fig. 15)
   The SOUND signal of the source thus selected is output from the speakers, while the VISUAL signal from the VIDEO terminals is output from VIDEO MONITOR OUT.

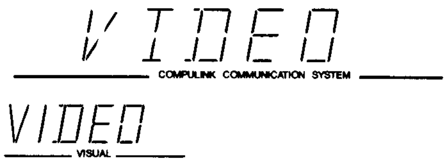


Fig. 14

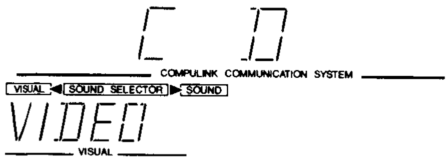


Fig. 15

Watching and listening to VCR

1. Press the VCR 1 (VCR 2) button so that the COMPU LINK COMMUNICATION SYSTEM and VISUAL indicators light and show "VCR 1" ("VCR 2").
2. Operate the VCR for playback as described in its operation manual.

Recording tapes

– Recording from records –

1. Press the PHONO button so that "PHONO" is displayed in the COMPU LINK COMMUNICATION SYSTEM indicator.
2. Operate the turntable.
3. Operate the tape deck for recording.

* For S.E.A./D.AP recording using the SEA D.AP REC button, refer to page 12.

– Recording from other sources (CD, FM, AM, DAT, VIDEO, VCR 1, VCR 2) –

Press the button corresponding to the source to be recorded. All other operations are identical to those when recording from records.

Note:

- **The sound you hear from the speakers or headphones is the source sound (record playback sound in this case), not the signal recorded on the tape.**

– How to operate the monitor while recording onto a tape deck –

1. Connect a 3-head tape deck to the TAPE 2 terminals.
2. Make sure that the signal cords are connected to the PLAY and REC terminals, and remove the remote cable connected to the tape deck.
3. Select a source from which you want to record by depressing the corresponding source select button.
4. Operate the tape deck for recording as described in its operation manual.
5. By playing the source component, you can record on the tape deck.
6. While recording on the tape deck, the recorded sound can be heard by pressing the TAPE 2 button on the front panel or remote control unit.

– If you are using a JVC three-head tape deck provided with COMPU LINK-1/SYNCHRO or SYNCHRO terminals –

1. Connect the COMPU LINK-1/SYNCHRO or SYNCHRO terminals of each unit using the remote cables provided.
2. Connect the tape deck to the TAPE 1 terminals.
3. You can monitor the recorded sound while recording by pressing the TAPE 1 button. Be careful not to monitor in the SEA REC mode, since pressing this button conceals the SEA REC function.
4. To return to listening to the source sound, press the button of the recorded sound's source.

– If you are using a three-head tape deck without the SYNCHRO terminals –

1. Connect the tape deck to the TAPE 2 terminals.
2. You can monitor the recorded sound while recording by pressing the TAPE 2 button.

Tape dubbing

To perform tape dubbing, two tape recorders should be connected, one to the TAPE 1 terminals (called the "No. 1" tape deck) and another to the TAPE 2 (called the "No. 2" tape deck).

– Dubbing from deck No. 1 to deck No. 2 –

1. Press the TAPE 1 button. Sound can be monitored through speakers or headphones.
2. Operate the No. 2 tape deck for recording.
3. Operate the No. 1 tape deck for playback.

– Dubbing from deck No. 2 to deck No. 1 –

1. Press the TAPE 2 button. Sound can be monitored through speakers or headphones.
2. Operate the No. 1 tape deck for recording.
3. Operate the No. 2 tape deck for playback.

Notes:

- **When dubbing from the tape deck (connected to the TAPE 2 terminals) onto the other tape deck, select a button other than "TAPE 1".**
- **When dubbing the SOUND signal from the No. 2 tape deck to the VCR 1, VCR 2 or DAT, use a selector other than "VCR 1", "VCR 2" or "DAT".**
- **While playing back a tape on the tape deck (connected to the TAPE 2 terminals), you cannot record other source sounds onto the component (connected to the REC terminals of the TAPE 2, DAT, VCR 1 and VCR 2 terminal).**
- **When dubbing the SOUND signal from the No.1 tape deck to the VCR 1, VCR 2 or DAT; press a SOURCE SELECT button other than "VCR 1", "DAT", "TAPE 1" and "TAPE 2" first, and after that "TAPE 1" button. In this case, S.E.A./D.AP recording is impossible.**
- **During dubbing, S.E.A./D.AP recording onto TAPE 2 is impossible.**
- **If a tape deck having three heads or a monitor facility is used, refer to page 16.**

Recording video tapes

– Recording from a video unit –

1. Press the VIDEO button.
2. Operate the video unit.
3. Operate the VCR 1 or VCR 2 for recording.

Notes:

- **Dubbing from VCR 1 to VCR 2 or from VCR 2 to VCR 1 is also possible. In this case, in step 1, above, press the source side button (VCR 1 or VCR 2).**
- **When the SOUND SELECTOR button is pressed, the SOUND SELECTOR function can be used for recording as described on page 16. The VISUAL signal from the VIDEO terminals and the SOUND signal selected are recorded on the VCR. (The SOUND signal cannot be from another video unit when the SOUND SELECTOR function is being used.)**

Using stereo headphones

Stereo headphones can be plugged into the front panel PHONES jack. The signal from this jack is independent of the speakers.

1. Plug the stereo headphones into the PHONES jack for private listening.
2. To listen through headphones while listening to the speakers, press the appropriate SPEAKERS button to ON (▬).

Note:

- **Pull out the headphone plug when not in use.**

How to perform DOLBY SURROUND or D.AP playback

Place the front and rear speaker systems appropriately referring to "Example of speaker placement in D.AP/DOLBY SURROUND sound system". (Fig. 16)

1. Press the D.AP button so that the D.AP "ON" indicator lights.
2. Select the required operation mode with the 4CH/2CH button.

   Note:
   - **When DOLBY SURROUND sound is required, set to the 4CH mode.**
3. Select the required effect mode with the DOLBY SURROUND and D.AP mode select buttons.

   Note:
   - **When playing back a video program, etc. with a DOLBY SURROUND™ mark, press the DOLBY SURROUND button, and when playing back a normal stereo (2-channel) source, press any of the D.AP mode select buttons.**
4. When DOLBY SURROUND is selected, adjust to the most appropriate delay time with the DELAY TIME buttons, and when any of the D.AP mode is selected, adjust the ROOM SIZE, LIVENESS and WALL TYPE with the corresponding buttons.
5. Start playback the program source.
6. Using the VOLUME button, adjust the volume of the front speakers for the 2CH mode, or adjust the volume of the front and rear speakers for the 4CH mode.
7. In the D.AP mode, adjust the level of the D.AP effect sound to be added to the front speakers sound using the D.AP LEVEL buttons.
8. In the 4CH mode, also adjust the volume of the rear speakers in relation to that of front speakers using the REAR LEVEL buttons.

* For details of buttons and indicators in the above operations, refer to the section in which the "Front Panel" is described.

Example of speaker placement in D.AP/DOLBY SURROUND sound system

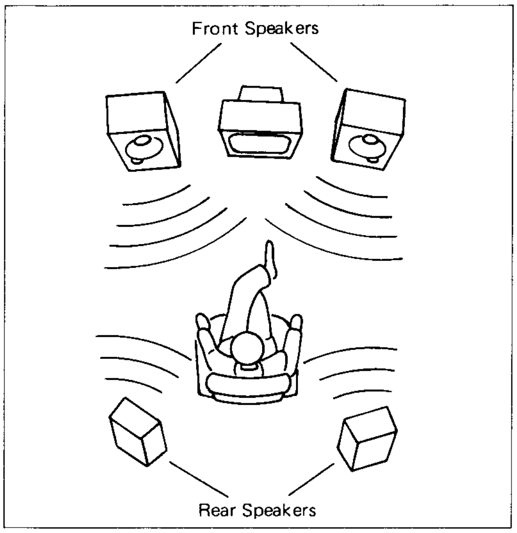


Fig. 16

In order to enjoy the DOLBY SURROUND sound and 4 CH mode D.AP sound, this is the standard way to place the system.
This has the greatest effect providing playback with great ambient fidelity.

How to input characters

Before starting to input characters, recall the tuner preset channel or S.E.A. Manual preset pattern (A – E) to be input or altered so that it is displayed in the CCS (COMPU LINK Communication System) indicator.

1. Press CHARACTER button to enter the character input mode.
   The character in the leftmost column blinks. If no character has been stored in this position, the coursor "–" will blink.
2. Select the desired character using DOWN/UP buttons. (The character will change in the order shown in the Fig. 17 when the DOWN/UP buttons are pressed.) Press CHARACTER button again so that the second character blinks.
   Repeat this operation to display all required characters. Up to 5 characters can be input.
   To change the character in any other position, press CHARACTER button repeatedly so that the character in the required position blinks.
3. After inputting the last character, press ENTER button to store the characters in memory.

For details of each of the above buttons, refer to the section in which the "Front Panel" is described.

Alphanumeric character order

- The character displayed is changed in the order shown in the figure when the DOWN and UP buttons are pressed.

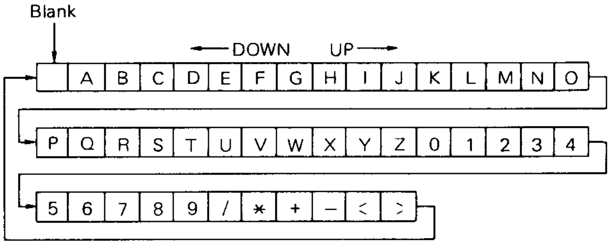

Blank
DOWN
UP
A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z 0 1 2 3 4
5 6 7 8 9 / * + – < >

Fig. 17

About the Digital Acoustics Processor (D.AP)

1. The history of sound field reproduction

All audio systems are intended to reproduce sound fields; this was the target, ever since the age of monaural sound. With a conventional stereo source, there is more directional information, which results in a two-dimensional sound field. However, the original sound contains sound field components caused by reflections and reverberations where the original recording took place. Our Digital Acoustics Processing extracts these components on the source signals and uses them to create a sound field which simulates that in a concert hall, etc. But this isn't all that it does; it takes into account the conditions of the listening room where the music is reproduced – its size, the degree to which sound is reflected from its walls and absorbed by its furnishings – so that the sound that the listener hears is a "realistic" recreation of the original performance.

2. Structure of sound field signals (Fig. 18-a, b)

The sound field signals obtained where the music is performed have three main components; direct sound (DS), early reflections (ER) and reverberations (REV).

Among these signal components, the key to the unique acoustic characteristics of any auditorium is the early reflections, generated by the direct, "original" sound, reflected one or more times from the walls and ceiling. Each of the reflections has a different level and appears to come from a different direction, and the pattern of early reflections is different for different concert halls, auditoriums and jazz clubs, wherever music is performed.

As described above (and can be seen in Fig. 18-a, b), the early reflections are the most important factor, and reach the listener's ears from various directions with various levels, depending on the characteristics of the auditorium.

At JVC, using a newly-developed sound field measurement analysis system, we've measured the sound fields in a number of places where music is performed and obtained a great deal of data concerning sound fields.

From these results, the relationship between the reflections and the sound field has been analyzed to calculate the typical reflection patterns in various concert halls, etc. Data from the above research is stored in memory element incorporated in the RX-1001VBK.

3. Description of each sound field pattern

- **SYMPHONY HALL**

  This simulates the sound heard in a typical concert hall where concerts, generally of classical music, are held. The data used as a basis for this pattern was measured in modern concert hall with an auditorium holding about 2,000 people. In this sound field, there are many reflections from side walls which create an extended sound field. It is suitable for playing most classical music, from orchestral works to chamber music and recreates the atmosphere of an actual concert hall.

- **RECITAL HALL**

  This recreates the conditions where chamber music and piano solos are performed and where accompanied vocalists sing, and you will be able to enjoy music as played in a small concert hall.

  Since it simulates a room with relatively harder walls made from wood or plaster, it provides a sound field, with many reflections.

- **LIVE CLUB**

  This recreates is the sound field heard in a jazz club with a wooden floor and a low ceiling. It provides many reflections with a relatively short delay; this sound field has the least "expansion" among the five patterns. It is most suitable for playing jazz and other music played by small and medium sized groups.

- **CHURCH**

  The sound field in a building with a high roof such as a church has longer-duration reflections. Suitable for organ music, choral works and other church music, etc. with solemn atmosphere.

  The echo duration is set at 2 seconds for both ROOM SIZE and LIVENESS parameters.

- **STADIUM**

  This mode simulates a large open-air arena with tiered stands, such as a baseball or football stadium, where the time delays of reflections are long and not much sound is reflected.

  When used with rock or pop music, you will feel you are at an outdoor concert with massive sound reinforcement equipment.

4. Description of Each Parameter

- **ROOM SIZE [1] – [5] (Fig. 19-a, b)**

  The higher the parameter level selected (from [1] to [5]), the wider the sound field. The delay before you hear the reflections will be extended and the timing with which reverberations decay will be longer. The levels of reflected sound images will not be changed.

- **LIVENESS [1] – [5] (Fig. 20-a, b)**

  The level of the reflections will be increased when a higher setting is selected, and a sound field containing many reflections will be obtained.

- **WALL TYPE [1] – [3] (Fig. 21-a, b)**

  The higher the level selected, the more high frequency components will increase, and the effect of having walls and a ceiling made of harder materials where the original recording was made will be obtained.

Typical Sound Field Pattern

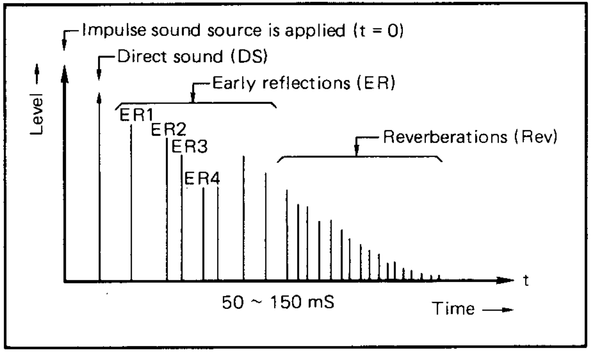
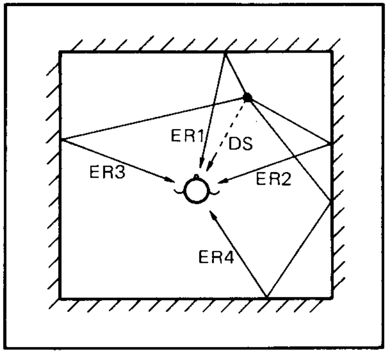


Fig. 18-a

Propagation of Early Reflections



Each reflection (ER1 to ER4) comes from a different direction

Fig. 18-b

Various Reflection Patterns depending on Different Room

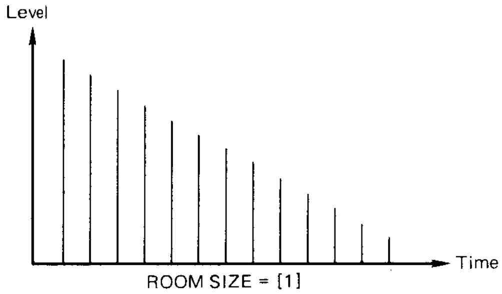


Fig. 19-a

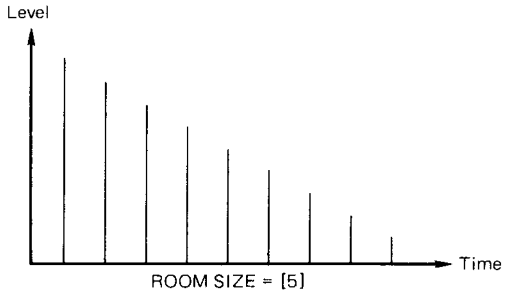


Fig. 19-b

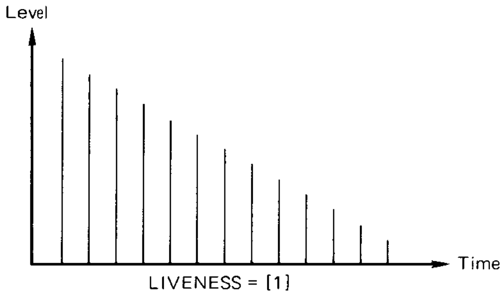


Fig. 20-a

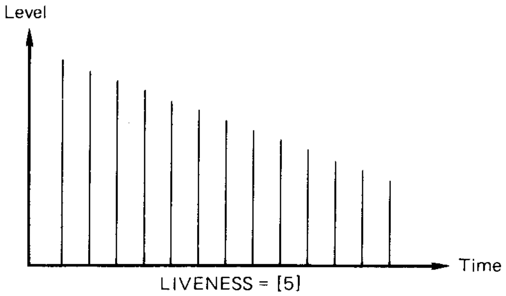


Fig. 20-b

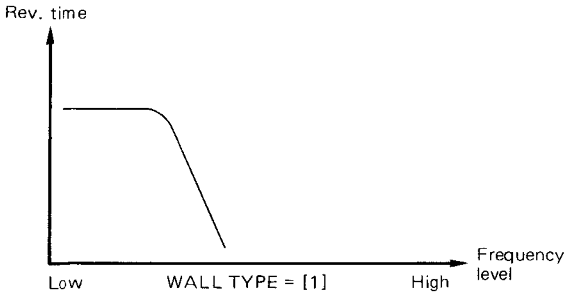


Fig. 21-a

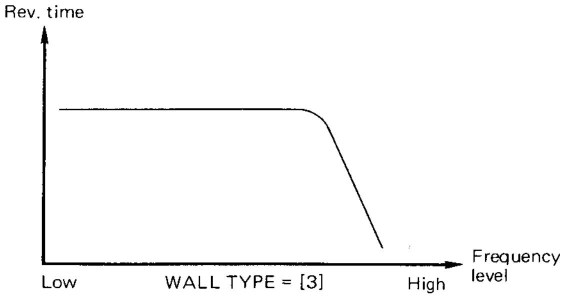


Fig. 21-b

REMOTE CONTROL UNIT (RM-SR1001)

Refer to page 37 and keep it open.

This remote control unit (RM-SR1001) has the two display modes; the Standard mode ([JVC] appears on the Indicator/Key panel) and the Programming mode ([PROGRAMMED] appears on the Indicator/Key panel).
The Programming (learning) mode has function key corresponding to the control button of a CD player, a DAT deck, a TV, a VCR and an external source component (CD, DAT, TV, VCR and EXT). These are provided so you can "teach" the remote control the functions of components with infrared remote controls, even from other manufacturers. It allows you to program the functions of the remote control units of existing audio, video and other remote controllable equipment into the RM-SR1001, so that they can be controlled directly from the RM-SR1001. (For programming operations, refer to "Programming Procedure" on page 29.)

❶ Programming buttons and indicators

LEARN indicator: This indicator blinks during programming and lights continuously when the programming (learning) operation of a function of another remote control unit has been completed.

ERROR indicator: This indicator lights when the control signal cannot be transmitted or when programming (learning) is impossible. It lights together with the LEARN indicator while setting the programming (learning).

SELECT: Select the display mode of the ❾ Indicator/Key panel with this button.

CLEAR: Press this button to clear all the functions stored in the buttons for one screen displayed on the ❾ Indicator/Key panel in the Programmable (learning) mode.

CHECK: During programming (learning), pressing this button enters the check mode. In this condition, you can check that the programming operation has been completed correctly by transmitting any memorized key function once, without changing the display mode using ⓯ USE/LEARN select switch.

EXT (Extra): This button is used to control a source component in addition to those that can be selected with the ⓬ SOURCE SELECT buttons in the Programming mode.

❷ POWER

AUDIO: Turn on or off the power of the RX-1001VBK.

TV: Turn on or off the power of the TV.

VCR 1: Turn on or off the power of the VCR.

Notes:

- **As long as one of the JVC-specified VCRs or TVs is used, it can be remote-controlled.**
- **Before operating the television or VCR by remote control, be sure to read the television or VCR instruction manual carefully.**

❸ LIGHT

When the red button located on the left side, a lamp lights to illuminate the ❾ Indicator/Key panel.

❹ REMOTE ON/OFF

The remote control unit alternates between on and off when this button is pressed. When switched off, the display on the panel goes out. When it is turned on again, the remote control unit returns to the previous operating mode. For example, if the remote control unit is turned off with "PHONO" displayed, when it is turned on again, "PHONO" will be selected automatically. When no further entry is made one hour after the last key operation, the remote control unit will be automatically turned off. To turn it on again, press the REMOTE ON/OFF button to switch it on.

❺ ♪ ON/OFF

Normally, when a control signal is transmitted, an electric buzzer beeps. If you don't want this beep, it can be switched on and off by pressing this key.
This key is effective for the USE and LEARN modes.

❻ REMOTE CONTROL

This shows the remote control operation mode currently selected.

JVC: In this mode, JVC's COMPU LINK components connected to the RX-1001VBK with remote cables can be controlled with this remote control unit.

PROGRAMMED: In this mode, any components the functions of which have been programmed can be controlled with the remote control unit, by transmitting the programmed signal to the component.

Transmit indicator (≋): This indicator blinks when a remote control signal is transmitted.

❼ Battery indicator (🔋)

When this indicator lights, the batteries are nearly discharged.
Replace the batteries with new ones referring to page 25.

❽ SLEEP TIMER

When this key is pressed, its indicator blinks. Each time this key is pressed, the sleep timer's setting increases in 10-minute increments up to 80 minutes; the sleep timer setting is shown on the display of the RX-1001VBK.

❾ Indicator/Key panel

This panel is a touch sensitive LCD (Liquid Crystal Display) which consists of indicators which act as operating keys. When one of the ⓫ DISPLAY buttons or the ⓬ SOURCE SELECT buttons is pressed, symbols will appear on the ❾ Indicator/Key panel; by pressing these, you can operate the selected component.
For example, if you choose a CD player as input, the menu associated with the CD player will appear on the ❾ panel; by pressing the keys, you can perform the required operation. (Refer to Fig. 53)

Notes:

- **When the "TAPE 2" SOURCE SELECT button is pressed, the panel display will not change.**
- **Each of the keys has the same function as one of the buttons on the front panel of the RX-1001VBK. For operation, refer to the description in the "Front Panel" section.**
- **The "TAPE 2" SOURCE SELECT button only switches the tape monitor switch ON or OFF. It does not control the TAPE 2 deck.**
- **"VCR 2" functions only in the Programming (learning) mode. It does not function in the Standard control mode.**

Standard Control Mode

When any of the (▶), (■), (❚❚), (◀◀), (▶▶), (⏮) or (⏭) keys for the TAPE 1, DAT, CD/CD CHANGER, and PHONO modes are pressed, the corresponding symbol will be displayed.

– TAPE 1 mode –

PLAY (▶): Press to play a tape.
STOP (■): Press to stop operation.
PAUSE (❚❚): Press to pause during playback or recording. To release this function, press the PLAY button.
MUSIC SCAN (⏮ , ⏭): Press one of these buttons to scan to the beginning of the required tune.
FF (▶▶): Press to fast wind the tape from left to right.
REW (◀◀): Press to fast wind the tape from right to left.
REC (●): While holding this button pressed, press the PLAY (▶) button to start recording. When this button is pressed together with the PAUSE (❚❚) button, the deck will enter the REC-PAUSE mode.
DIRECTION: Press to change the direction of tape travel.

– DAT mode –

PLAY (▶): Press to start play.
STOP (■): Press to stop operation.
PAUSE (❚❚): Press to suspend playback or recording temporarily.
FF (▶▶): Press to fast forward the tape.
REW (◀◀): Press to rewind the tape.
REC (●): While holding this button pressed, press the PLAY (▶) button to start recording. When this button is pressed together with the PAUSE (❚❚) button, the deck will enter the REC-PAUSE mode.
AUTO SEARCH:
(⏮): Press to skip to the beginning of the previous tune.
(⏭): Press to skip to the beginning of the next tune.

Note:

- **(⏮) and (⏭) buttons of this unit have the some function as the (⏮) and (⏭) buttons on the specified DAT deck**

1 – 9, 10, +10: Select the track No. of tune No. to be listened to or to be programmed.
When selecting a track or tune with a number of 10 or higher, first press +10 the required number of times, then one of 1 to 10. (See Ex.)

<Examples>

5 : Press [5] .
10 : Press [10] .
17 : Press [+10] once, the press [7] .
20 : Press [+10] once, the press [10] .
25 : Press [+10] twice, then press [5] .

– CD/CD CHANGER mode –

TRACK :

1 – 10, 0, +10: Use these keys to assign the track numbers (1 – 10) for a disc which is to be played or programmed. To assign a track number over 10, use a combination of the +10 key with a numeric keys.

Notes:

- **10, +10: These keys are used exclusively for the CD player.**
- **0, 10, +10: The use of these keys depends on the CD player. For details, refer to the instruction book provided with the CD player.**

PLAY (▶): Press to start play.
STOP (■): Press to stop play.
OPEN/CLOSE: Press to move the disc tray in and out.
PAUSE (❚❚): Press to suspend play temporarily.
AUTO SEARCH (⏮): Press to skip back to the beginning of the current tune or the previous tune during play. The pickup will go back one tune each time the key is pressed. If the key is held down, the pickup will go back continuously, one tune at a time, until the key is released.
AUTO SEARCH (⏭): Press to skip ahead to the beginning of the next tune during play. The pickup will be advanced to the beginning of next tune each time the key is pressed. If the key is held down, the pickup will skip ahead continuously, one tune at a time, until the key is released.
MANUAL SEARCH (◀◀): Press to search for the portion required to be played by moving the pickup back quickly during play.
MANUAL SEARCH (▶▶): Press to search for the portion required to be played by moving the pickup forward quickly during play. During fast-forwarding, sound can be heard at reduced volume level.

PLAY MODE
Press one of these buttons to select a JVC CD AUTO CHANGER.
CONTINUE: Press this button to listen to compact discs loaded in the CD magazine in the numerical order regardless of the programmed playback setting.
PRGM: Press this button to listen to the compact discs in programmed order.
MAG. PRGM: Press this button to listen to the compact discs in the order of the program previously stored for each magazine.
When any PLAY MODE button is pressed, "MODE" lights in the display.

DISC :

These keys are for setting the disk number of the CD AUTO CHANGER.
P: Press to play or program a disc on the SINGLE PLAY TRAY.
1 – 6: Press to play or program discs in a magazine.

Note:

- **For details, refer to the instruction book provided with the CD player.**

– PHONO mode –

PLAY (▶): Press to start play.
STOP (■): Press to stop play.

– TUNER mode –

1 –10,+10: Select the required preset channel 0 key is not used at this time. When selecting a preset channel with a number of 10 or higher, first press +10 the required number of times, the one of 1 to 10 keys. (See Ex.)

<Examples>

5 : Press [5] .
10 : Press [10] .
17 : Press [+10] once, the press [7] .
20 : Press [+10] once, the press [10] .
25 : Press [+10] twice, then press [5] .

DOWN UP (–, +): Press to scan preset stations sequentially.

– **D.AP/SEA mode** –

SEA: Press to listen to the source with S.E.A. compensation.

SEA PRESET: Press to select an S.E.A. pattern. Each time this key is pressed, the preset pattern of the equalizer is changed in the order MANUAL A – B – C – D – E – PROGRAMMED A – B – C – D – E, then returns to MANUAL A again.

63 Hz – 16 kHz: Press to select the frequency band.

DOWN UP (–, +)

– : Press to decrease the response in the frequency band selected by the 63 Hz – 16 kHz keys.

+ : Press to increase the response in the frequency band selected by the 63 Hz – 16 kHz keys.

D.AP: Press to listen to the source with the D.AP or DOLBY SURROUND effect.

D.AP MODE: Press to select the DOLBY SURROUND mode or any required D.AP mode. Every time the key is pressed it changes from DOLBY SURROUND to SYMPHONY HALL, RECITAL HALL, LIVE CLUB, CHURCH, STADIUM and back to DOLBY SURROUND again.
The display will show "DOLBY" → "HALL 1" → "HALL 2" → "CHRCH" → "CLUB" → "STDUM" and back to "DOLBY" again.

DELAY TIME: Press to adjust the delay time in the DOLBY SURROUND mode. Each time the key is pressed, the delay time will be lengthened, while the indicator is changed in order 1 – 2 – 3 – 4 – 5, then back to 1.

MODE

SIZE: Press to adjust the "ROOM SIZE" (width of the sound field). Each time the key is pressed, the width of the sound field will be increased sequentially, while the indicator changes in the order 1 – 2 – 3 – 4 – 5, then back to 1.

LIVE: Press to adjust the "LIVENESS" (amount of reflection in the sound field). Each time the key is pressed, the amount of reflections will be increased, in sequence, while the indicator is changed in the order 1 – 2 – 3 – 4 – 5, then back to 1.

WALL: Press to adjust the "WALL TYPE". Each time the key is pressed, the wall material (of the room where the music was played) will be harder in sequence, while the indicator changes in the order 1 – 2 – 3, then back to 1.

REAR LEVEL (–, +)

– : Press to decrease the REAR LEVEL.

+ : Press to increase the REAR LEVEL.

D.AP LEVEL (–, +)

– : Press to decrease the D.AP LEVEL.

+ : Press to increase the D.AP LEVEL.

BALANCE (L, R)

L: Press to shift the balance to the left by one step. Holding this key pressed changed the balance continuously.

R: Press to shift the balance to the right by one step. Holding this key pressed changed the balance continuously.

– **TV mode** –

1 – 9, 0: Press to select the TV channel.

<Example>

4 : Press 4. Or, press 0 then 4.
13 : Press 1 then 3.

DOWN UP (–, +): Press to scan TV channels sequentially.

Notes:

- **For details of operation, refer to the instruction book provided with the television.**
- **Among the JVC's components, there are TV's that cannot be operated by the RM-SR1001. If you wish to use the RM-SR1001, program the TV's remote control functions on to the RM-SR1001. Refer to pages 26 to 31.**

– **VCR mode** –

1 – 9, 0: Press to select the channel of the VCR.

<Example>

4 : Press 4. Or, press 0 then 4.
13 : Press 1 then 3.

DOWN UP (–, +): Press to scan VCR channels sequentially.

PLAY (▶): Press to play a video tape.

STOP (■): Press to stop operation.

PAUSE (❙❙): Press to pause during playback or recording. To release this function, press the PLAY button.

FF (▶▶): Press to fast forward a tape.

REW (◀◀): Press to rewind a tape.

REC (●): While holding this key pressed, press the PLAY (▶) key to start recording. When this key is pressed together with the PAUSE (❙❙) key, the deck will enter the REC-PAUSE mode.

Notes:

- **For details of operation, refer to the instruction book provided with the VCR.**
- **Among the JVC's components there are VCR's that cannot be operated by the RM-SR1001. If you wish to use the RM-SR1001, program the VCR's remote control functions on to the RM-SR1001. Refer to pages 26 to 31.**

For keys having the same indications (names) as those on the front panel of the RX-1001VBK, refer to the description of the "Front Panel" section.

⑩ Component controlled display

Press the ⑪ DISPLAY buttons or the ⑫ SOURCE SELECT buttons to select the component to be controlled. The selected source (but not TAPE 2, VCR 2) will appear on this section.

⑪ DISPLAY

Press these buttons to select the source component or D.AP/S.E.A. mode to be controlled. The source display for control ⑩ indicates the selected source or D.AP/ S.E.A., and the associated symbols will appear on the ⑨ Indicator/ Key panel.

Note:

- **The DISPLAY button does not control the source selector on the front panel (RX-1001VBK) directly. The source selector will only change when any of the opera-**

tion keys displayed on the ⑨ Indicator/Key panel is pressed after pressing this button.

⑫ SOURCE SELECT

Press these buttons when any required source component or D.AP/S.E.A. unit is to be controlled. The ⑩ component controlled display indicates the selected source or D.AP/S.E.A., and the relevant symbols will appear on the ⑨ Indicator/Key panel.

TAPE 1: Press to listen to a tape deck connected to the TAPE 1 terminals.

TAPE 2: Press to listen to a tape deck connected to the TAPE 2 terminals. If you press this button once more, it will release this function so that the source selected by another source select button may be heard.

Note:

- **Press this button to monitor the recorded sound (to listen to the sound just recorded on the tape) when using a three-head tape deck.**

FM: Press to listen to an FM broadcast.

AM: Press to listen to an AM broadcast.

DAT: Press to listen to a DAT deck connected to the DAT terminals.

CD: Press to listen to a CD player connected to the CD terminals.

PHONO: Press to listen to a turntable connected to the PHONO terminals.

VCR 1: Press to watch and listen to the source from the VCR 1 connected to the VCR 1 terminals.

VCR 2: Press to watch and listen to the source from the VCR 2 connected to the VCR 2 terminals.

VIDEO/TV: Press to watch and listen to the source from the video unit connected to the VIDEO/TV terminals.

Note:

- **When source selection is done from the front panel of the RX-1001VBK, the front panel and remote control source displays will be different: The new source will be displayed on the front panel of the RX-1001VBK while the source indicator of the remote control unit is not changed.**

⑬ MUTE

Press this button to instantly mute the sound. To return to the original sound level, press this button again or press the ⑭ VOLUME button.

⑭ VOLUME (–, +)

Press the – button to decrease the volume and the + button to increase it.

⑮ USE/LEARN select switch

USE: Normally set to this position. The JVCs original control signals or programmed (learned) control signals will be transmitted to the relevant component.

LEARN: When programming (learning) the function of other remote control unit, set to this position. In this mode, no control signals can be transmitted.

Batteries

- **How to install batteries (Fig. 22)**

1. Slide the cover of the battery compartment in the direction of the arrow to remove it.
2. Install the provided batteries with the correct polarity. (It is recommended that the batteries with a longer service life are used.)
   SIZE "AAA" x 6
3. Re-install the cover of the battery compartment.

Note:

- **When replacing the batteries, be sure to set the ⓯ USE/LEARN switch on the rear panel of the remote control unit to the USE position.**

- **How to use the batteries**

Improper use of the batteries can cause leakage or damage. So, take the following precautions:

1. Install batteries with their polarities properly placed.
2. Do not mix new and used batteries.
3. Use the same brand and type of batteries because otherwise the voltages may differ sightly.
4. If the remote control unit will not be used for a long time remove the batteries.
   Also, follow the instructions on the batteries.

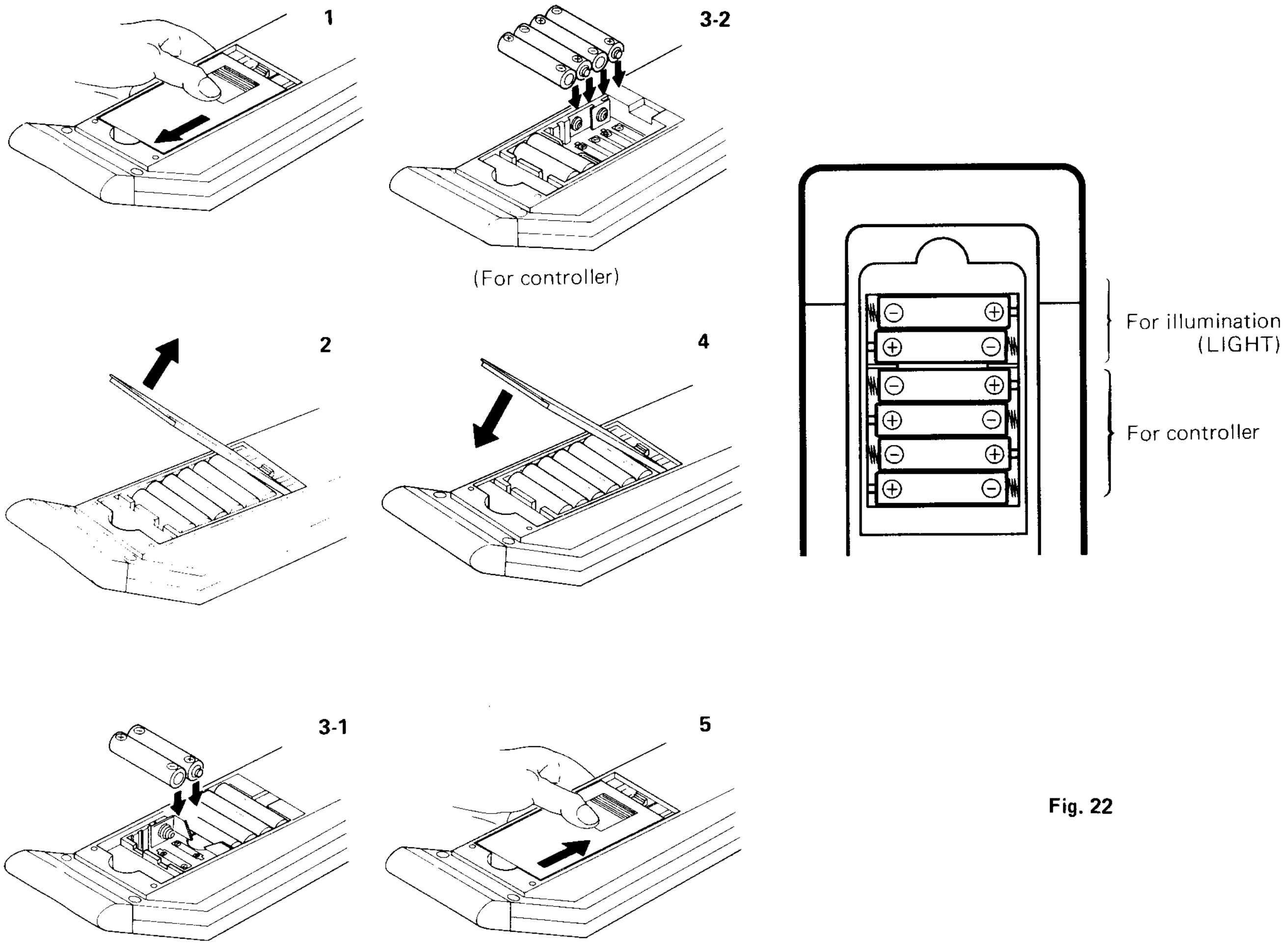
- **Battery replacement time**

When the ❼ battery indicator lights or distance from which the remote control unit is effective starts to decrease, replace all control batteries with new ones.

When the illumination of the ❾ Indicator/Key panel is dim when the ❽ LIGHT button is pressed, replace the two batteries used for illumination.

Notes:

- **When the remote control is operated too near the receiver during AM reception, it may cause interference.**
- **The remote control can be used up to about 8 m (26 ft) from the receiver.**



(For controller)

(For illumination (LIGHT))

Fig. 22

HOW TO PERFORM PROGRAMMING (LEARNING)

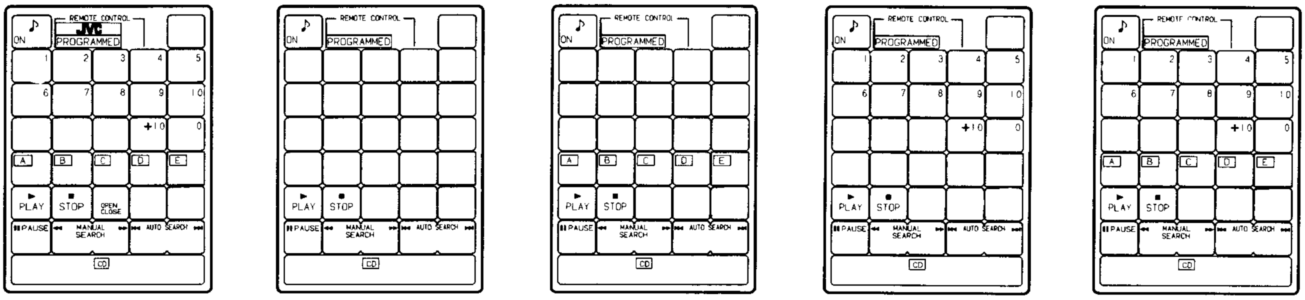
The RM-SR1001 can be programmed to memorize functions of remote control units from other manufacturers.
Each operation key can be programmed to "remember" operation key functions for five different sources – CD, DAT, TV, VCR and EXT.
Three to five menu screens are available for each of the five different sources (CD, DAT, TV, VCR and EXT). (See Fig. 23 – Fig. 28)
Select the required ❾ Indicator/Key panel display using the ❶ SELECT button.

- Only one screen of each mode can be programmed. Changing to other screens cannot be done even if the ❶ SELECT button is pressed after the first key is programmed. When you wish to program other screens, first cancel the present screen and then select a different screen. The method for cancelling is explained on page 31.
- Besides displaying on the screen, it is possible to program on the ❷ "TV" and "VCR 1" POWER buttons.
  This is valid only when each of the modes (TV and VCR 1) is in the PROGRAMMED mode.

Indicator/Key Panel in LEARNING mode

CD mode

(1) (2) (3) (4) (5)



REMOTE CONTROL
JVC
ON
PROGRAMMED
1 2 3 4 5
6 7 8 9 10
+10 0
A B C D E
PLAY
STOP
OPEN CLOSE
PAUSE
MANUAL SEARCH
AUTO SEARCH
CD

JVC. MODE 5 KEY / 7 KEY / 12 KEY / 19 KEY / 24 KEY

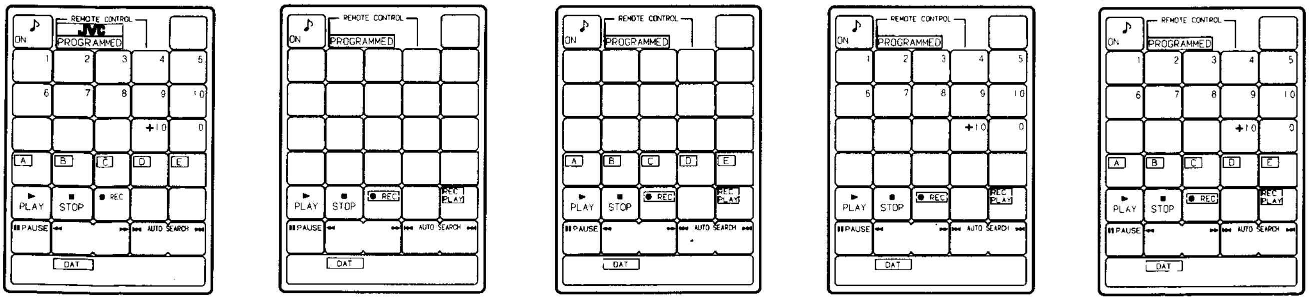
Fig. 23

Note:

- **In the JVC mode, programming can be done only for menu screens Ⓐ to Ⓔ.**

DAT mode

(1) (2) (3) (4) (5)



REMOTE CONTROL
JVC
ON
PROGRAMMED
1 2 3 4 5
6 7 8 9 10
+10 0
A B C D E
PLAY
STOP
● REC
REC PLAY
PAUSE
AUTO SEARCH
DAT

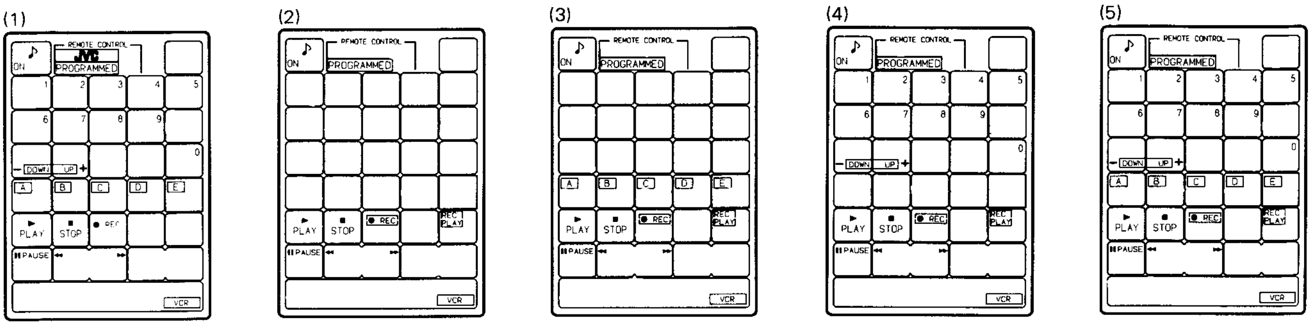
JVC. MODE 5 KEY / 8 KEY / 13 KEY / 20 KEY / 25 KEY

Fig. 24

Note:

- **In the JVC mode, programming can be done only for menu screens Ⓐ to Ⓔ.**

VCR 1 mode (Menu screen when the ⑮ USE/LEARN select switch is set to LEARN mode after pressing the VCR 1 (⑪ or ⑫) button.)


(1)
(2)
(3)
(4)
(5)
REMOTE CONTROL
PROGRAMMED
JVC
ON
DOWN
UP
A
B
C
D
E
PLAY
STOP
REC
REC PLAY
PAUSE
VCR

JVC. MODE 5 KEY

7 KEY

12 KEY

19 KEY

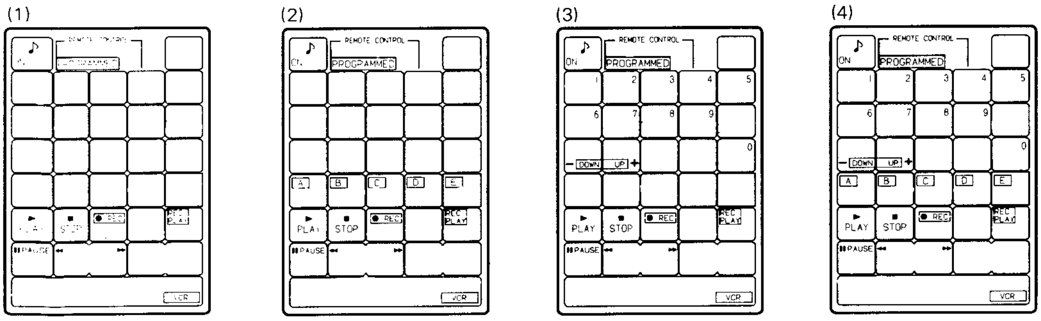
24 KEY

Fig. 25

Notes:

1. **In the JVC mode, programming can done only for menu screens Ⓐ to Ⓔ.**
2. **In modes (2) through (5), the ② "VCR 1" POWER button can also be programmed.**
3. **When programming is done on VCR 1 mode, programming cannot be done on VCR 2 mode.**
   (Becomes selection of source only and nothing will be displayed on the ⑨ Indicator/Key Panel)

VCR 2 mode (Menu screen when the ⑮ USE/LEARN select switch is set to LEARN mode after pressing the ⑫ VCR 2 button.)


(1)
(2)
(3)
(4)
REMOTE CONTROL
PROGRAMMED
ON
DOWN
UP
A
B
C
D
E
PLAY
STOP
REC
REC PLAY
PAUSE
VCR

6 KEY

11 KEY

18 KEY

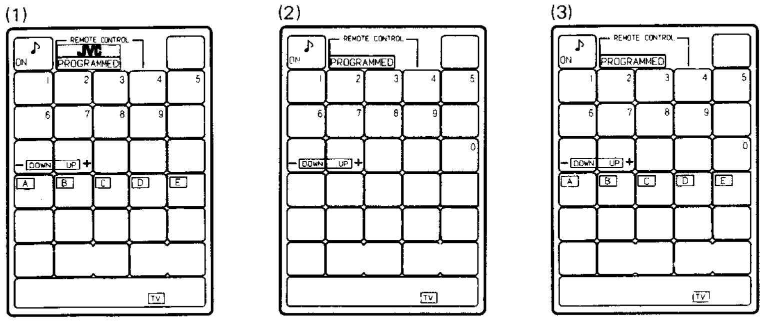
23 KEY

Fig. 26

Note:

- **When programming is done in the VCR 2 mode, the VCR 1 mode becomes the menu for the JVC mode only and programming cannot be done on the VCR 1 mode and ② "VCR 1" power button.**

TV mode


(1)
(2)
(3)
REMOTE CONTROL
JVC
PROGRAMMED
ON
1
2
3
4
5
6
7
8
9
0
DOWN
UP
A
B
C
D
E
TV

JVC. MODE 5 KEY

13 KEY

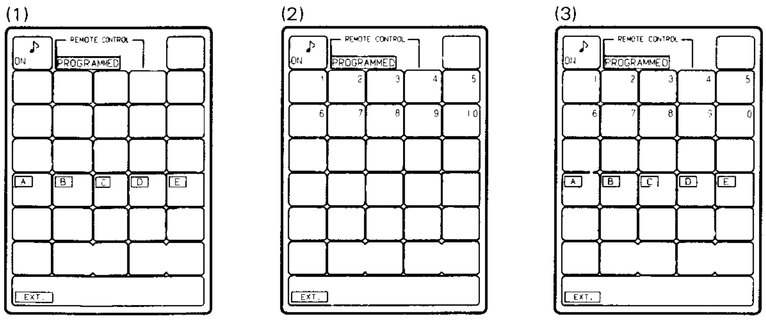
18 KEY

Fig. 27

Notes:

- **In the JVC mode, programming can only be done for menu screens A to E .**
- **In modes (2) or (3), the ❷ "TV" POWER button can also be programmed.**

EXT mode


(1)
(2)
(3)
REMOTE CONTROL
PROGRAMMED
ON
1
2
3
4
5
6
7
8
9
10
0
A
B
C
D
E
EXT.

5 KEY

10 KEY

15 KEY

Fig. 28

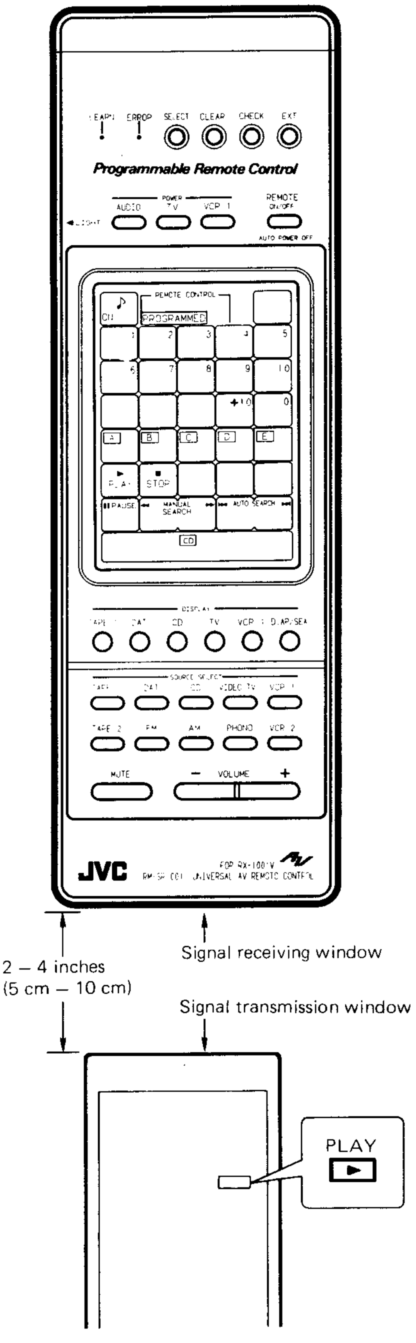

LEARN
ERROR
SELECT
CLEAR
CHECK
EXIT
Programmable Remote Control
POWER
AUDIO
TV
VCR 1
REMOTE ON/OFF
AUTO POWER OFF
REMOTE CONTROL
PROGRAMMED
PLAY
STOP
PAUSE
MANUAL SEARCH
AUTO SEARCH
DISPLAY
SOURCE SELECT
MUTE
VOLUME
JVC
2 – 4 inches
(5 cm – 10 cm)
Signal receiving window
Signal transmission window
PLAY
Remote control unit from
other manufacture

Fig. 29

Programming Procedure

1. Select the source to be programmed using any of the ⓫ DISPLAY buttons or ⓬ SOURCE SELECT buttons. (Fig. 31)
2. Set the ⓯ USE/LEARN switch on the rear panel of the remote control unit to the LEARN position. (Fig. 32)
   After changing to the LEARN position, the screen cannot be changed. If you wish to change the screen, change to the USE position and start over from step 1.
3. Select the required menu pattern for ❾ Indicator/Key panel using the ❶ SELECT button. (Fig. 33)
4. Put the two remote controls on a table with the transmission window of the remote control the functions of which are to be learned pointing towards the signal receiving window at the rear of the RM-SR1001. Leave a distance of about 2 – 4 inches (5 – 10 cm) between them. (Fig. 34)
5. Press the key on the RM-SR1001 in which you want to program other function. (Fig. 35)
   The ❶ LEARN indicator will blink (for about 7 seconds). (Fig. 36)
   If the ❶ ERROR indicator lights at the same time, a function has already been memorized in that key. (Fig. 37)
   If only the ❶ ERROR indicator lights, you have pressed a key which cannot be used for programming. (Fig. 38)
   Select another key and try again from the beginning.
6. While the ❶ LEARN indicator is blinking (for about 7 seconds), press the button of the other remote control unit the function of which is to be memorized. (Fig. 39)
   While setting program, the ❶ LEARN indicator lights from the blinking state and the ❶ ERROR indicator lights. (Fig. 40)
   When program setting has been completed, the ❶ LEARN indicator lights (Fig. 41)
   If programming has not been performed correctly, the ❶ ERROR indicator lights on its own. In this case, perform the operations in steps 5 and 6 again. (Fig. 42)
7. To memorize other functions into other keys of the RM-SR1001, or when a mistake has been made in the programming operation, perform the operations in steps 5 and 6 again.
8. Set the ⓯ USE/LEARN switch to the USE position. (Fig. 44)

With the above operations, pressing the key currently displayed on the ❾ Indicator/Key panel in which a function has been programmed will activate the programmed function.

How to use the special keys

The following keys (Fig. 30) are displayed for the DAT, VCR 1 and VCR 2 modes. Programming is done by pressing both keys at the same time. This is so that when in actual use after programming, recording operation will not be activated even if a key is mistakenly pressed. As a result, programming cannot be done by any one button.
When using in the USE mode after programming, both buttons also have to be pressed at the same time to operate.

● REC
REC
PLAY

Fig. 30

Note:

- **Programming cannot be done using either one of these keys in combination with other keys.**

1

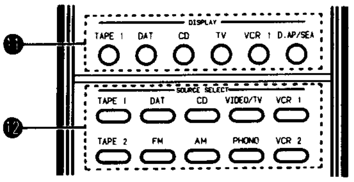

⑪
⑫
DISPLAY
TAPE 1
DAT
CD
TV
VCR 1
D.AP/SEA
SOURCE SELECT
TAPE 1
DAT
CD
VIDEO/TV
VCR 1
TAPE 2
FM
AM
PHONO
VCR 2

Fig. 31

2

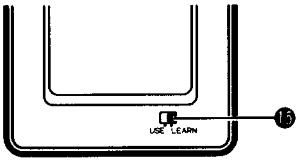


Fig. 32

3

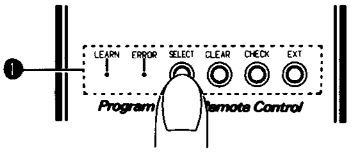

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 33

4

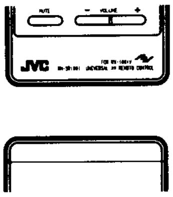

MUTE
VOLUME
JVC

Fig. 34

5

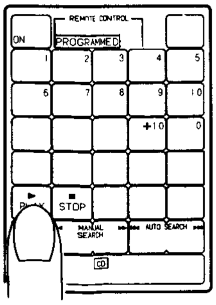

REMOTE CONTROL
ON
PROGRAMMED
1
2
3
4
5
6
7
8
9
10
+10
0
PLAY
STOP
MANUAL SEARCH
AUTO SEARCH
CD

Fig. 35

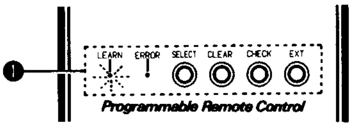

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 36

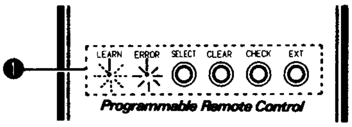

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 37

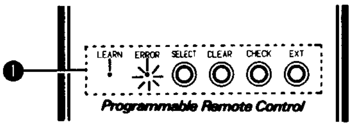

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 38

6

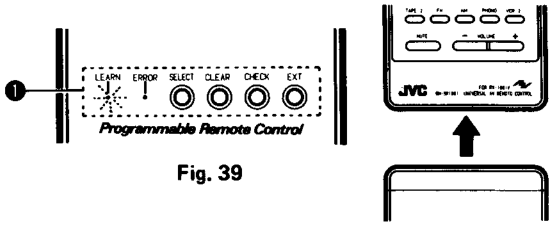

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control
JVC

Fig. 39

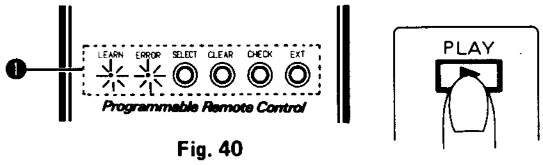

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control
PLAY

Fig. 40

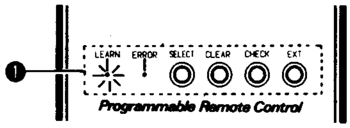

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 41

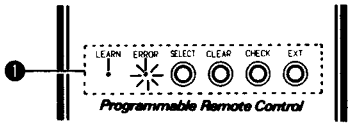

❶
LEARN
ERROR
SELECT
CLEAR
CHECK
EXT
Programmable Remote Control

Fig. 42

7

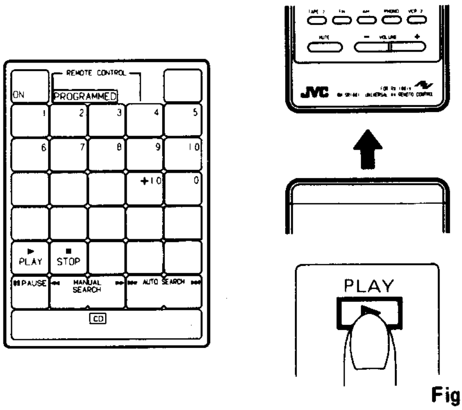

REMOTE CONTROL
ON
PROGRAMMED
1
2
3
4
5
6
7
8
9
10
+10
0
PLAY
STOP
PAUSE
MANUAL SEARCH
AUTO SEARCH
CD
JVC
PLAY

Fig. 43

8

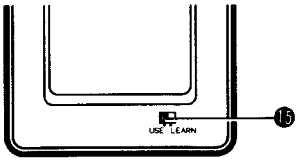


Fig. 44

Notes:

- To program a key function correctly, while both the LEARN and ERROR indicators are lit, keep pressing the button on the other remote control.
- When a key in which a function has been programmed does not work correctly after being used for a long period, perform programming again. With certain components, slightly different remote control signals may not be acceptable.
- Special control signals such as those transmitted for a longer period cannot be programmed into this remote control unit.
  If programming is impossible or correct operation is not possible even after trying three or four times, the other remote control may use these special signals.
- The functions of another remote control when two keys are pressed in sequence can be programmed into a single key of the RM-SR1001. (Except for REC or REC/PLAY functions.)
  In this case, perform programming in sequence according to the key operation of the other equipment.
- When programming the REC or REC/PLAY function (to start recording), it is safer if you program it pressing two keys of this remote control simultaneously.
  This is to make misoperation difficult, to protect against accidental erasure.
- When VCR 1 mode has been programmed, no function can be programmed in the VCR 2 mode, to prevent misoperation when two VCRs are connected to the RX-1001VBK.
- Up to 106 key functions can be programmed with this remote control unit.
  The number of keys in which functions have been programmed will be counted and indicated in the ❾ Indicator/Key panel of each menu screen selected by the ❶ SELECT button.
- For proper operation be sure to aim the RM-SR1001 at the target component. Especially when transmitting a key programmed from the remote controls of other JVC's component at the RX-1001VBK, there may be ties (although rare) when the RX-1001VBK will malfunction.

How to Cancel Programming

When canceling programming, all key functions for the selected screen will be erased at once. The function assigned to a single key cannot be erased.

1. Set the ⓯ USE/LEARN switch on the rear panel to the LEARN position.
2. Press the ❶ CLEAR button.
   The ❾ Indicator/Key panel blinks twice, and the Standard control mode screen will appear.
3. Set the ⓯ USE/LEARN switch to the USE position.

Note:

- After step 2, if a new menu screen is selected on ❾ Indicator/Key panel using the ❶ SELECT button, the programming mode will be activated.

Indicator lighting (For programming)

◌ : Blinks ☼ : Lights continuously ○ : Does not light

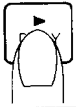
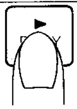
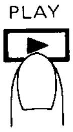
Button on RM-SR1001	Button on other remote control	LEARN indicator	ERROR indicator	Status
Step 5 	–	◌	○	Button in which no function has been memorized
Step 5 	–	◌	☼	Button in which a function has been memorized
–	Step 6, 7 	☼	☼	While memorizing a setting
		☼	○	Memorizing complete
		○	☼	Memorizing incomplete
Step 5		○	☼	Incorrect button is pressed

Fig. 45

Removal Procedures

- **Removing the metal cover**
  1. Remove the four screws on both sides.
  2. Remove the two screws located on the top of the rear panel.
  3. Slightly open both sides of the metal cover, to the left and right, and raise the rear side. Then slowly lift it up and straight backward.

- **Removing the front panel**
  1. Remove the metal cover.
  2. Remove the plastic rivets Ⓐ fastening the front panel on its upper side. (See Fig-1)
  3. Remove three screws fixing the front panel on its under side, and then pull out the front panel.

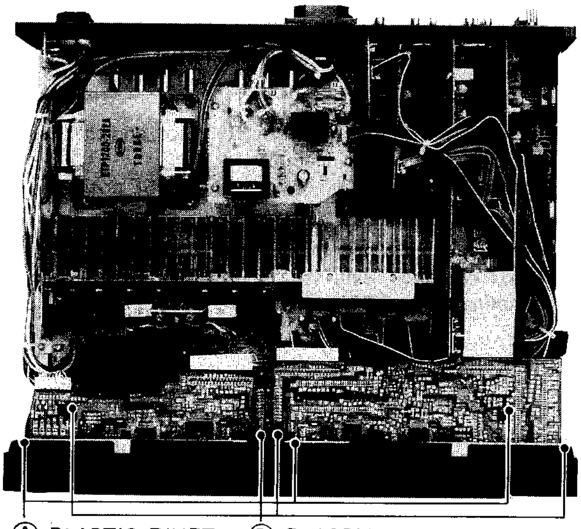


Fig. -1

- **Removing the front switch PC Board**
  1. Remove the front panel.
  2. Pull off five plastic rivets fixing the front switch PC Board.
  3. Lift up the front switch PC Board and pull it off toward you from the connectors. (See Fig-2)

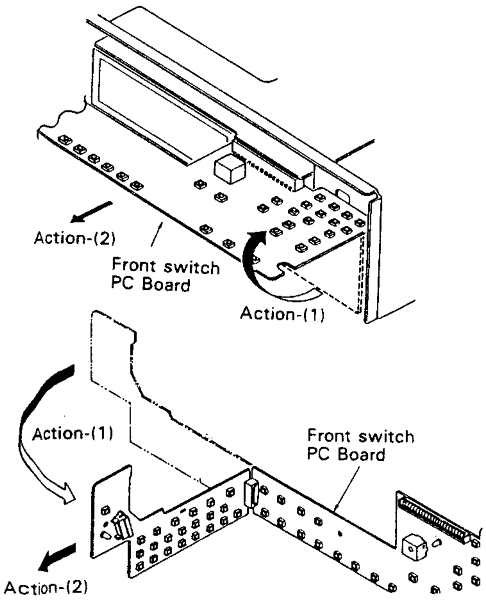


Fig. -2

- **Removing the LCD PC Board**
  1. Remove the front switch PC Board.
  2. Pull off four plastic rivets Ⓑ fixing the LCD PC Board. (See Fig-1)
  3. Pull off the flat wires (30 pins, 37 pins).
  4. Remove the left side LCD PC Board forward. (See Fig-3)
  5. Pull off pins connectors (3 pins, 9 pins).
  6. Remove the right side LCD PC Board backward.

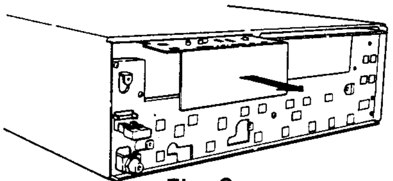


Fig. -3

- **Removing the power transistors**
  1. Remove the metal cover.
  2. Remove all seventeen screws holding the bottom plate. Then remove the bottom plate.
  3. Remove the four screws holding the PC Board (ENP-006). (See Fig-4)
  4. Remove the two screws holding the shield bracket. Then remove the shield bracket.
  5. Unsolder the power transistors.
  6. Remove the screws holding the power transistors using a pair of pliers, a wrench, or a bent screwdriver.

Note: Remove the PC Board (ENH-100-2) holding on the heat sink if removing the transistors Q734, Q015, Q016, Q017 and Q018.

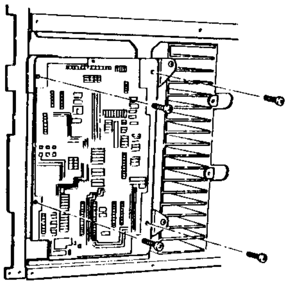


Fig. -4

- **Removing the joint PC Board (ENE-046-4)**
  1. Pull off the flat wires from the sockets.
  2. Release two fasteners holding the PC Board.
  3. Lift up a side of the joint PC Board and pull it up from the connector. (See Fig-5)

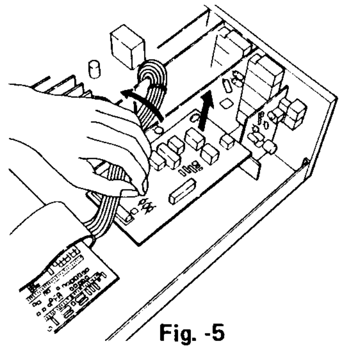
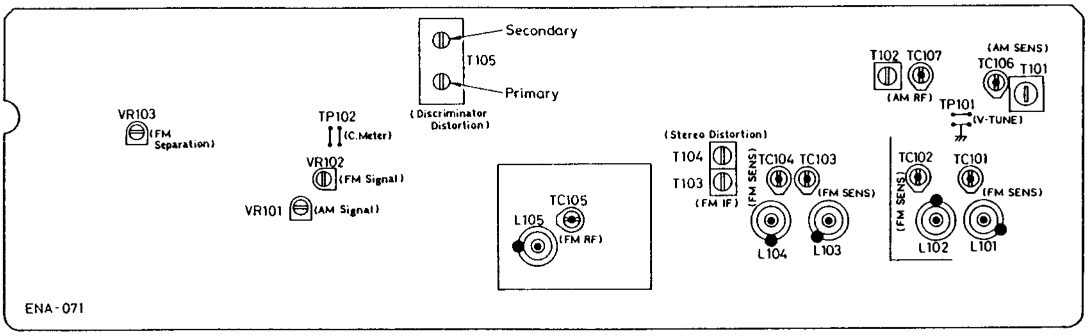


Fig. -5

Note: Confirm the voltages on foil side of ENE-046-2 with removing the rear panel and pcb (ENE-046-3.)
The ground is floating when removing ENE-046-3, then take a ground to ENF-042-1 with shorting wire or pin cord.

FM/AM Tuner Alignment Procedures



■ FM Section

FM tuning range

1. Connect a DC voltmeter to test point "TP-101(W102-W103)", and set the FM MODE switch to the "MONO" position.
2. Set the frequency display to "87.5 MHz".
3. Adjust L105 so that the voltage of test point "TP-101" becomes 7.5V±0.1V.
4. Set the frequency display to "108 MHz" and adjust TC105 so that the voltage becomes 22.0V±0.1V.
5. Repeat the above adjustments of L105 and TC105 alternately until reference voltage is obtained.

FM sensitivity

1. Connect an RF generator to the antenna terminals on the rear panel through a dummy load antenna.
2. Connect an AC voltmeter and an oscilloscope to the "REC. OUT" terminal on the rear panel.
3. Set an RF generator to 89.9 MHz, a 1 kHz modulation and a 75 kHz diviation to provide an input of 2μV (6 dB).
4. Set the frequency display to 89.9 MHz.
5. Adjust L101, L102, L103 an L104 to maximize the output.
6. Adjust IFT(T103) to maximize the output.
7. Set the RF generator to 105.9 MHz and set the frequency display to 105.9 MHz.
8. Adjust TC101, TC102, TC103 and TC104 to maximize the output.
9. Repeat the low and high frequencies adjustment alternately until maximum output is obtained.

Discriminator Distortion

1. Connect an RF generator, a 1 kHz modulation and a 75 kHz deviation to the antenna terminals on the rear panel through a dummy antenna.
2. Connect an oscilloscope, distortion meter and AC voltmeter to the "REC. OUT" terminal on the rear panel.
3. Set the RF generator to 100.1 MHz, generator output to 60 dB (1 mV).
4. Set the frequency display to 100.1 MHz.
5. Connect a DC voltmeter between TP-102.
6. Adjust the primary core of T105 for DC voltmeter reading of 0±1.5 mV.
7. Adjust the secondary core of T105 so that the distortion is minimized.
8. Repeat these items alternately.

Stereo Distortion: T104

Note: This adjustment is after the discriminator distortion adjustment.

1. Set the RF generator to 100.1 MHz, generator output to 60 dBμ (1 mV) and switch the selector of stereo-modulator to left channel modulation.
2. Set the frequency display to 100.1 MHz.
3. Confirm the QSC display off.
4. Adjust T104 so that the distortion is minimized.

Stereo Separation: VR103

1. Set the RF generator to 100.1 MHz, generator output to 60 dB (1 mV) and switch the selector of stereo-modulator to left channel modulation.
2. Set the frequency display to 100.1 MHz.
3. Confirm the QSC display off.
4. Adjust VR103 so that the output of right channel is minimized.
5. Switch the selector of stereo-modulator to right channel modulation.
6. Confirm the output of left channel.
7. Set VR103 to an average, if the separation of left and right is different.

FM Signal Strength Display: VR102

1. Set the RF generator to 100. 1MHz, 40dB(100 μV). While rotating VR102 clockwise, adjust the FM-strength meter so that this meter displays 40 dB.

■ AM Section

AM tuning range

1. Connect a loop antenna to the "AMLOOP" terminals on the rear panel.
2. Connect a DC voltmeter to test point "TP-101 (W102-W103)"
3. Set the frequency display to "522 KHz" (9 kHz channel step) or "530 kHz" (10 kHz channel step).
4. Adjust T102 so that the voltage of test point "TP-101" becomes 0.9 V ± 0.2 V (522 kHz), 1.0 V ±0.3 V (530 kHz).
5. Set the frequency display to "1629 kHz" or "1710 kHz".
6. Adjust TC107 so that the voltage becomes 7.5 V ±0.5 V (1629 kHz), 8.2 V (1602 kHz).
7. Repeat the above adjustment of T102 and TC107 alternately until reference voltage is obtained.

AM Sensitivity

1. Connect a loop antenna to the "AMLOOP" terminals on the rear panel. Also connect an RF generator, a 400 Hz modulation and a 30% deviation to the antenna terminals through a dummy antenna.
2. Connect an AC voltmeter and an oscilloscope to the "REC OUT" terminal on the rear panel.
3. Set the RF generator to,600 kHz (or 603 kHz).
4. Set the frequency display to 600 kHz (or kHz).
5. Adjust T101 to maximize the output.
6. Set the RF generator to 1400 kHz (or 1404 kHz).
7. Set the frequency display to 1400 kHz (or 1404 kHz)
8. Adjust TC106 to maximize the output.
9. Repeat the above adjustments of T101 and TC106 alternately until maximum sensitivity is obtained.

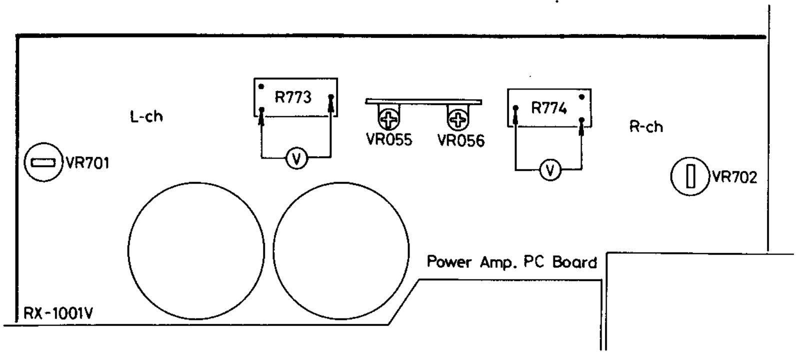
AM Signal Strength Display: VR101

1. Connect the RF generator to the antenna terminals on the rear panel through the dummy antenna with 5.6 kΩ in series.
2. Set the RF generator to 1000 kHz (or 999 kHz), generator output to 2.2 mV (67 dB)
3. Set the frequency display to 1000 kHz (or 999 kHz).
4. While rotating VR101 clockwise, adjust the AM-signal strength meter so that displays 80 dB.

Power Amplifier Adjustment Procedures

■ Idling Current Adjustment

1. Trun VR701 and VR702 fully counterlockwise before the power switch on.
2. Warm up at least 5 minutes before adjustment.
3. Must keep the heatsink to prevent overheating before adjustment.
4. Set the volume control to minimum during this adjustment.
5. Connect a DC voltmenter to R773 resistor's leads for left channel, or to R774 for right channel.
6. Adjust VR701 for left channel, or VR702 for right channel, so that the DC voltmeter becomes 5mV ±3mV.



■ Power Supply switching circuit Adjustment

(Except of the U.S.A. and Canada.)

1. Connectan an AC voltmeter and an oscilloscope to the speaker terminal.
2. Before turning the power ON, turn the semi-fixed resistors (VR055 for the left channel and VR056 for the right) on the power amplifier PC Board fully countercloskwise.
3. Turn the power ON and provide a 100 Hz sine wave to the left (or right) channel of the CD input terminals.
4. Connect a 7Ω dummy load to the speaker terminal and adjust the volume control so that 29V is output. At this time, minimize the output level of the other channel with the BALANCE control.
5. Turn the semi-fixed resistor (VR055 for the left channel or VR056 for the right) slowly clockwise, and stop when the output waveform begins clipping on the oscilloscope.
6. Replace the 7Ω dummy load with an 8Ω one, and confirm that the output waveform does not clip.

Note: This adjustment should be performed for the channels one at a time.

■ Confirm the waveforms for surround effects

Dolby Surround

1. Set the D.A.P switch to "ON".
2. Set the 4CH indicator to "ON".
3. Set the SEA switch to "OFF".
4. Set the Dolby surround to "ON".
5. Provide a sine wave signal 100Hz, 200mV p-p to the right channel of CD input terminals.
6. Connect the X-axis of oscilloscope to the input signal and the Y-axis to the right channel of speaker terminals.
7. Adjust the volume control to 200mV p-p at the right channel of speaker terminals.
8. Set the oscilloscope to X-Y axis.
9. Confirm the waveform. (Fig.-1)

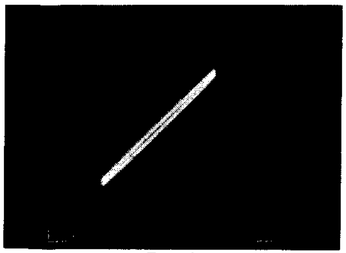


Fig.-1

Dolby surround

1. Set the "Delay Time" to 2, 3 and 4.
2. Provide a sine wave signal 100 Hz, 200 mVp-p to the left channel of CD input terminals.
3. Connect the X-axis of oscilloscope to the input signal and the Y-axis to the left channel of "REAR PRE. OUT".
4. Set the "SURROUND BALANCE" on the rear panel to center position.
5. Adjust the "REAR LEVEL volume" and "Volume control" to 200mV at the left channel of "REAR PRE. OUT"
6. Set the oscilloscope to X-Y axis.
7. Confirm the waveforms. (Fig.-2,3,4)

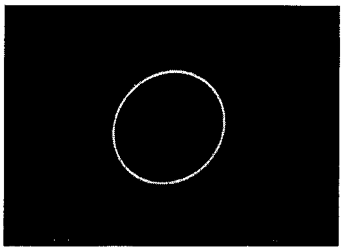


Fig.-2

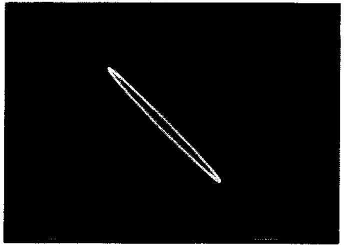


Fig.-3

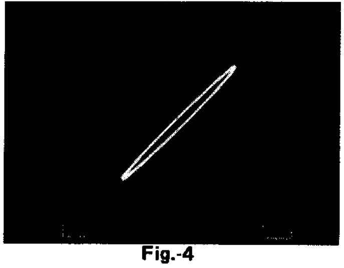


Fig.-4

Dolby Surround

1. Set the "Deley Time" to 3.
2. Provide a sine wave signal 100 Hz, 200 mV p-p to the right channel of CD input terminals.
3. Connect the X-axis of oscilloscope to the input signal and the Y-axis to the right channel of speaker terminals.
4. Adjust the "REAR LEVEL volume" and "Volume control" to 200 mV p-p at the right channel of "REAR PRE. OUT".
5. Set the oscilloscope to X-Y axis.
6. Confirm the waveform. (Fig.-5)

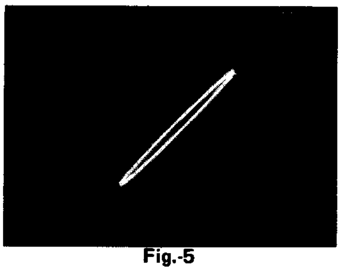


Fig.-5

LIVE CLUB

1. Set the "Live Club" to ON.
2. Provide a sine wave signal 100 Hz, 200mVp-p to the left channel of CD input terminals.
3. Connect the X-axis of oscilloscope to the input signal and the Y-axis to the left channel of "REAR PRE. OUT".
4. Set the "Room size" to 3, "Liveness" to 3 and "Wall type" to 2.
5. Adjust the "REAR LEVEL volume" and "Volume control" to 200 mV at the left connel of "REAR PRE. OUT".
6. Confirm the waveform. (Fig.-6)

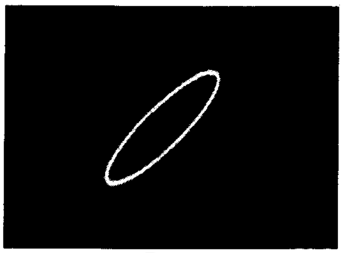
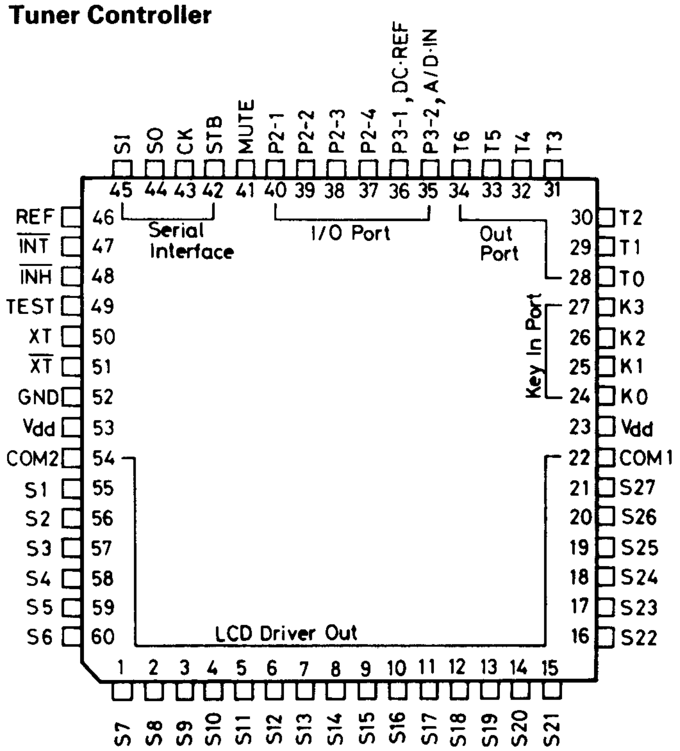


Fig.-6

Internal Block Diagrams of ICs

■ TC9306F-028BS (IC421): Tuner Controller

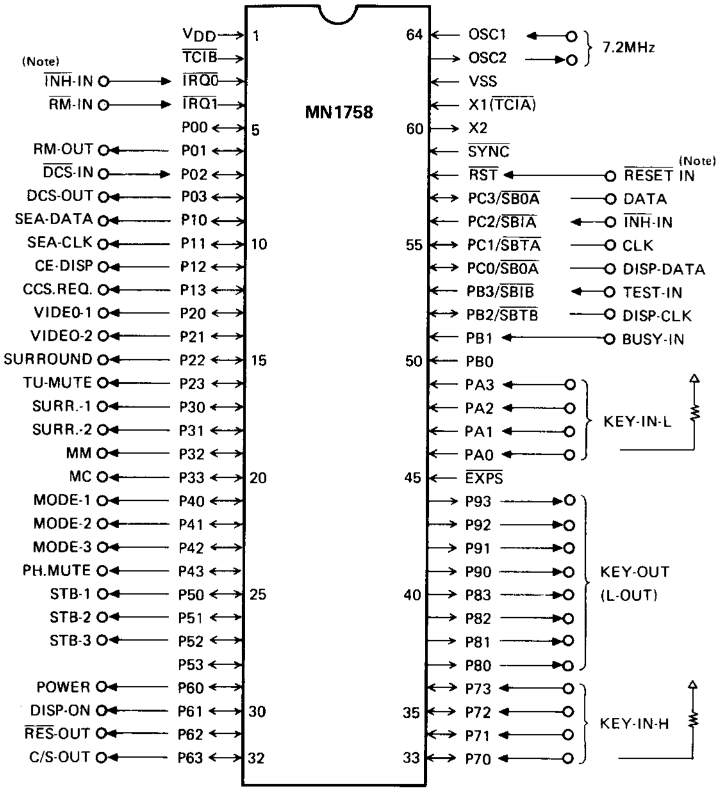
(1) External Diagram


SI
SO
CK
STB
MUTE
P2-1
P2-2
P2-3
P2-4
P3-1, DC·REF
P3-2, A/D·IN
T6
T5
T4
T3
45 44 43 42 41 40 39 38 37 36 35 34 33 32 31
Serial Interface
I/O Port
Out Port
REF 46
INT 47
INH 48
TEST 49
XT 50
XT 51
GND 52
Vdd 53
COM2 54
S1 55
S2 56
S3 57
S4 58
S5 59
S6 60
30 T2
29 T1
28 TO
27 K3
26 K2
25 K1
24 KO
Key In Port
23 Vdd
22 COM1
21 S27
20 S26
19 S25
18 S24
17 S23
16 S22
LCD Driver Out
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21

(2) Pin Functions

Pin No.	Symbol	Name	I/O	Terminal Function
55~60 1~21	SEG.1~ ~SEG.27	Segment1~ ~Segment27	O	Drive the LCD segment.
22	COM 1	Common 1	O	Drive the common 1 of the LCD.
54	COM 2	Common 2	O	Drive the common 2 of the LCD.
24	K0	Key in 0	I	Key input
25	K1	Key in 1	I	Key input
26	K2	Key in 2	I	Key input
27	K3	Key in 3	I	Key input
28	T0	Key out 0	O	Key output
29	T1	Key out 1	O	Key output
30	T2	Key out 2	O	Key output
31	T3	Key out 3	O	Key output
32	T4	Key out 4	O	Key output
33	T5	Key out 5	O	Key output
34	T6	Key out 6	O	Key output
35	A/D IN	A/D input or TUNED input	I	Input for signal meter or input for TUNED indicator
36	DC REF	DC reference	I	Reference voltage for A/D
37	P2-4	Key out 7	O	Key output
38	P2-3	DCS IN	I	Input for Direct Call System
39	P2-2	DCS OUT	O	Output for Direct Call System
40	P2-1	STEREO IN	I	Input for stereo indicator
41	MUTE	MUTE	O	"H" output when muting is turned ON.
42	STB	STB	O	Serial Data Bus (Connect to LC7217.)
43	CK	CK	O	Serial Data Bus (Connect to LC7217.)
44	SO	SO	O	Serial Data Bus (Connect to LC7217.)
45	SI	SI	I	Serial Data Bus (Connect to LC7217.)
46	REF	REF	O	Output for PLL reference frequency
47	INT	INT	I	Initialized at "L" level
48	INH	INH	I	State of inhibit at "L" level
49	TEST	TEST	---	Terminal of crystal osccilator (7.2 MHz)
50	XT	XT	---	Terminal of crystal osccilator (7.2 MHz)
51	XT	XT	---	Terminal of crystal osccilator (7.2 MHz)
52	GND	GND	---	Ground
23,53	V DD	V DD	---	+5V (Connecting inside)

■ MN17581JSM (IC441): System Controller


MN1758
(Note)
VDD 1
TCIB
INH-IN IRQ0
RM-IN IRQ1
P00 5
RM-OUT P01
DCS-IN P02
DCS-OUT P03
SEA-DATA P10
SEA-CLK P11 10
CE-DISP P12
CCS.REQ. P13
VIDEO-1 P20
VIDEO-2 P21
SURROUND P22 15
TU-MUTE P23
SURR.-1 P30
SURR.-2 P31
MM P32
MC P33 20
MODE-1 P40
MODE-2 P41
MODE-3 P42
PH.MUTE P43
STB-1 P50 25
STB-2 P51
STB-3 P52
P53
POWER P60
DISP-ON P61 30
RES-OUT P62
C/S-OUT P63 32
64 OSC1
OSC2
7.2MHz
VSS
X1(TCIA)
60 X2
SYNC
RST RESET IN
(Note)
PC3/SB0A DATA
PC2/SBIA INH-IN
55 PC1/SBTA CLK
PC0/SB0A DISP-DATA
PB3/SBIB TEST-IN
PB2/SBTB DISP-CLK
PB1 BUSY-IN
50 PB0
PA3
PA2
PA1
PA0
KEY-IN-L
45 EXPS
P93
P92
P91
P90
40 P83
P82
P81
P80
KEY-OUT (L-OUT)
P73
35 P72
P71
33 P70
KEY-IN-H

Note: TRQO and PC2/SBIA may be connected and used.

(2) Pin Functions

Pin No.	Port	Input/Output Name	I/O	Function		Off	Back-up
1	V_{DD}	———	I	5V			
2	TCIB	———	I	GND			
3	IRQ0	INH-IN	I	L=AC off; enters back up mode			
4	IRQ1	RM-IN	I	Remote control input			
5	P00	———				L	L
6	P01	RM-OUT	O	Remote control IND, ON (H: ON)		L	L
7	P02	DCS-IN	I	DCS input, Input at negative logic		L	L
8	P03	DCS-OUT	O	DCS output		L	L
9	P10	SEA-DATA	O	S-DATA of LC7522 (SEA)		L	L
10	P11	SEA-CLK	O	S-CLK of LC7522 (SEA)		L	L
11	P12	CE-DISP	O	CE of LC7582 (display driver)		L	L
12	P13	CCS-REQ.	O	L=DATA OUT REQ. (at time of CCS data output)		L	L
13	P20	VIDEO-1	O	VIDEO signal switching		L	L
14	P21	VIDEO-2	O	VIDEO signal switching		L	L
15	P22	SURROUND	O	H=SURROUND ON		L	L
16	P23	TU-MUTE	O	H=TUNER MUTE (at times other than that of the source tuner)		L	L
17	P30	SURR. 1	O	Surround switching		L	L
18	P31	SURR. 2	O	Surround switching		L	L
19	P32	MM	O	MM/MC cartridge switching	H=MM	L	L
20	P33	MC	O		H=MC	L	L
21	P40	MODE-1	O	Surround mode switching	H=MODE 1	L	L
22	P41	MODE-2	O		H=MODE 2	L	L
23	P42	MODE-3	O		H=MODE 3	L	L
24	P43	PH. MUTE	O	PHONO MUTE at the time of MC/MM switching		L	L
25	P50	STB-1	O	STB of analog switch VOL.		L	L
26	P51	STB-2	O	STB of analog switch VOL.		L	L
27	P52	STB-3	O	STB of VOL-A		L	L
28	P53	———	O			L	L
29	P60	POWER	O	H=AC (POWER) ON		L	L

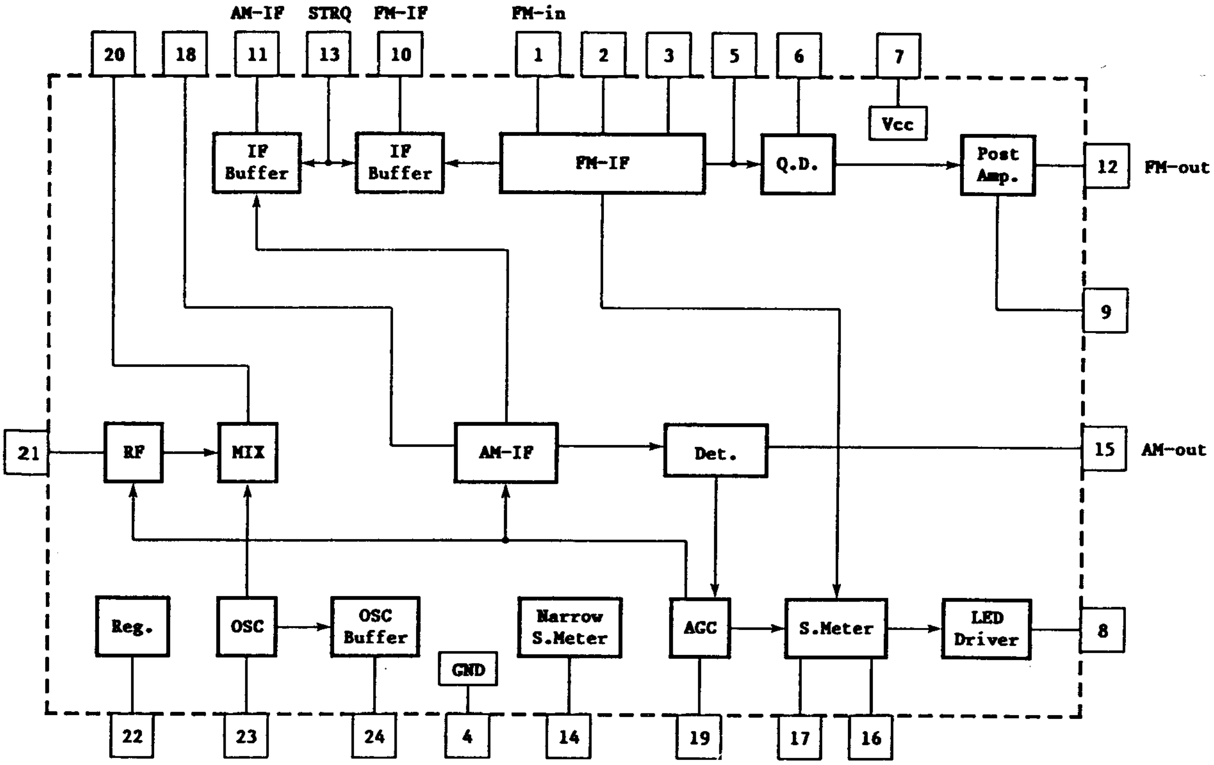
Pin No.	Port	Input/Output Name	I/O	Function	Off	Back-up
30	P61	DISP-ON	O	H=display on (INH of the TUBER and LC7582)	L	L
31	P62	$\overline{\mathrm{RES}}$ OUT	O	RESET output (with respect to CCS)	H	H
32	P63	C/S-OUT	O	Chip select output, L output	L	L
33	P70	KEY-IN-H	I	KEY input, L take-in		L
34	P71	KEY-IN-H	I	KEY input, L take-in		L
35	P72	KEY-IN-H	I	KEY input, L take-in		L
36	P73	KEY-IN-H	I	KEY input, L take-in		L
37	P80	KEY-OUT	O	KEY output, L output		L
38	P81	KEY-OUT	O	KEY output, L output		L
39	P82	KEY-OUT	O	KEY output, L output		L
40	P83	KEY-OUT	O	KEY output, L output		L
41	P90	KEY-OUT	O	KEY output, L output		L
42	P91	KEY-OUT	O	KEY output, L output		L
43	P92	KEY-OUT	O	KEY output, L output		L
44	P93	KEY-OUT	O	KEY output, L output		L
45	EXPS	———	I	OPEN	–	–
46	PAO	KEY-IN-L	I	KEY input, L take-in		
47	PAI	KEY-IN-L	I	KEY input, L take-in		
48	PA2	KEY-IN-L	I	KEY input, L take-in		
49	PA3	KEY-IN-L	I	KEY input, L take-in		
50	PB0	———			L	L
51	PB1	BUSY-IN	I	H=C.C.S output OK (at the time of CCS data output)	L	L
52	PB2/$\overline{\mathrm{SBTB}}$	DISP-CLK	O	S-CLK of LC7582 and C.C.S.	L	L
53	PB3/$\overline{\mathrm{SBIB}}$	TEST-IN	I	H=TEST MODE	L	L
54	PCO/$\overline{\mathrm{SBOB}}$	DISP-DATA	O	S-DATA of LC7582 and C.C.S.	L	L
55	PC1/$\overline{\mathrm{SBTA}}$	DISP-CLK	O	S-CLK of analog switch, VOL.	L	L
56	PC2/$\overline{\mathrm{SBIA}}$	$\overline{\mathrm{INH}}$-IN	I	L=AC off; enters back-up mode	–	–
57	PC3/$\overline{\mathrm{SBOA}}$	INH-DATA	O	S-DATA of analog switch, VOL.	L	L
58	$\overline{\mathrm{RST}}$	$\overline{\mathrm{RESET}}$	I	$\overline{\mathrm{RESET}}$ input		
59	$\overline{\mathrm{SYNC}}$	———	O	OPEN		
60	X1($\overline{\mathrm{TCIA}}$)	———	I	Pull up		
61	X2	———	O	OPEN		
62	V_{SS}	———	I	GND		
63	OSC2	———	O	7.2 MHz RESONATOR		
64	OSC1	———	I	7.2 MHz RESONATOR		

■ MN17581JSP (IC461): Display Control

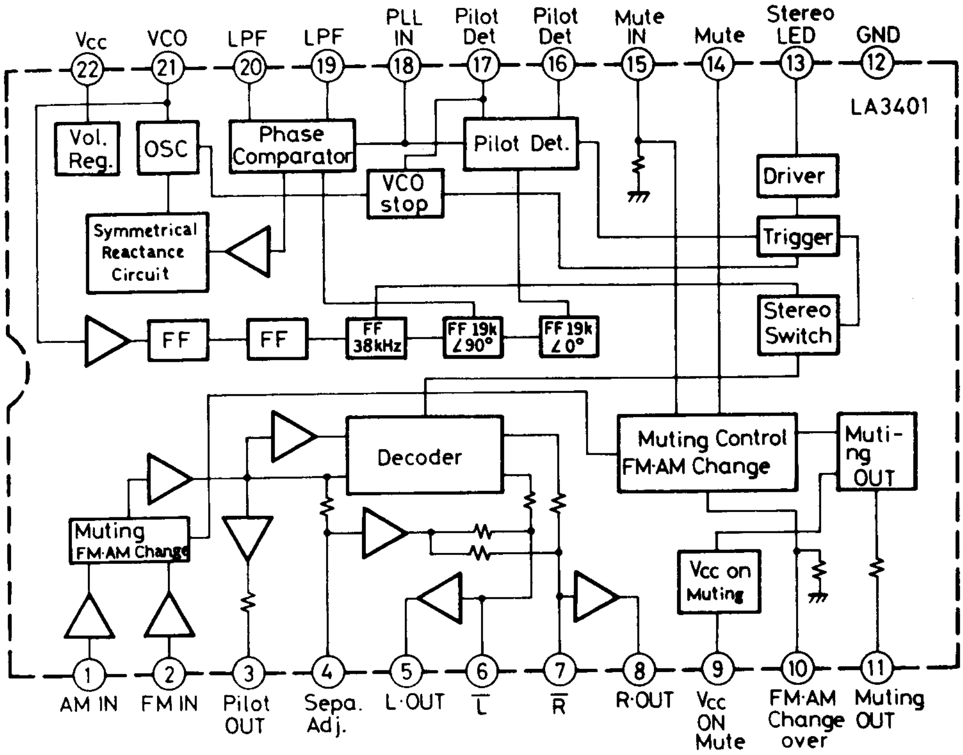
Pin No.	Port	Input/Output Name	I/O	Function	
1	V_{DD}	–	I	5 V supply	
2	TCIB	–	I	Not used	
3	IRQ0	–	I	INH input: microcomputer starts at H	
4	IRQ1	–	I	Display data request	
5	P00	Key input	I	Chapter	
6	P01	Key input	I	Enter	
7	P02	Key input	I	Up	
8	P03	Key input	I	Down	
9 ↓ 24				Not used	
25	P50	D0	I	DAP display data 5 bit	Not used at time of RX-999
26	P51	D1	I	DAP display data 5 bit	Not used at time of RX-999
27	P52	D2	I	DAP display data 5 bit	Not used at time of RX-999
28	P53	D3	I	DAP display data 5 bit	Not used at time of RX-999
29	P60	D4	I	DAP display data 5 bit	Not used at time of RX-999
30	P61	DAP,REQ	I	DAP display data REQUEST	Not used at time of RX-999
31				Not used	

Pin No.	Port	Input/Output Name	I/D	Function
32				Not used
33	P70	RES	O	LC7584-8701 reset out
34	P71	CE	O	LC7584-8701 CE out
35	P72	SOUND SELECTOR	O	Sound selector out
36	P73	Busy	O	Display BUSY OUT
37 ↓ 46				Not used
47	PA1		I	H at time of RX-1001
48				Not used
49	PA3	DISP.ON	I	Display START input
50	PB0	REQ	I	Display data REQUEST
51	PB1	INH	I	INH input
52	SBTB	CL	O	LC7584-8701 serial clock out
53				No used
54	SBOB	DI	O	LC7584-8701 serial data out
55	SBTA	DSP-CLK	I	Display data CLK
56	SBIA	DSP-DATA	I	Display data
57				No used
58	RST	RESET	I	RESET input
59 ↓ 61				No used
62	VSS	VSS	I	GND
63	OSC2		I	7.2 MHz resonator connection
64	OSC1		I	7.2 MHz resonator connection

■ LA1266A (IC102): FM/AM IF

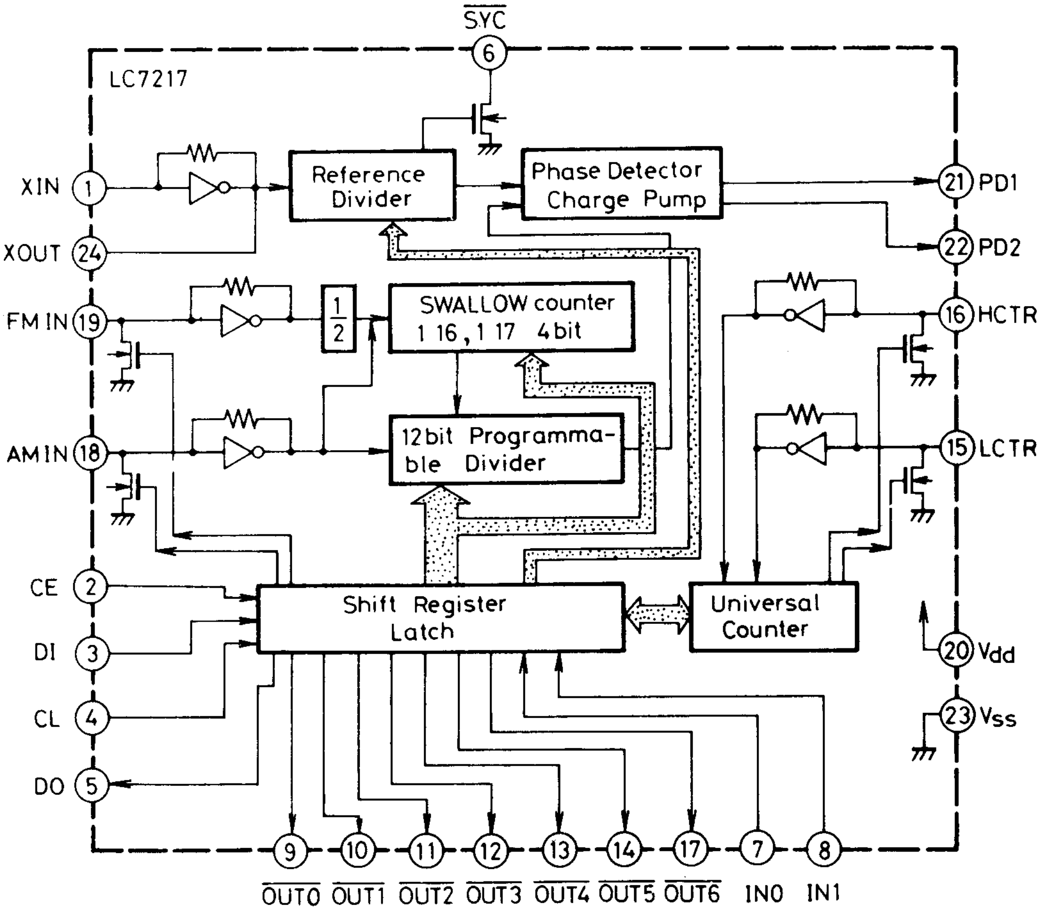

AM-IF
STRQ
FM-IF
FM-in
20
18
11
13
10
1
2
3
5
6
7
Vcc
IF Buffer
IF Buffer
FM-IF
Q.D.
Post Amp.
12
FM-out
9
21
RF
MIX
AM-IF
Det.
15
AM-out
Reg.
OSC
OSC Buffer
GND
Narrow S.Meter
AGC
S.Meter
LED Driver
8
22
23
24
4
14
19
17
16

■ LA3401 (IC103): FM MPX


Vcc
VCO
LPF
LPF
PLL IN
Pilot Det
Pilot Det
Mute IN
Mute
Stereo LED
GND
22
21
20
19
18
17
16
15
14
13
12
LA3401
Vol. Reg.
OSC
Phase Comparator
Pilot Det.
VCO stop
Driver
Trigger
Symmetrical Reactance Circuit
Stereo Switch
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Decoder
Muting Control FM·AM Change
Muti-ng OUT
Muting FM·AM Change
Vcc on Muting
1
2
3
4
5
6
7
8
9
10
11
AM IN
FM IN
Pilot OUT
Sepa. Adj.
L·OUT
L̄
R̄
R·OUT
Vcc ON Mute
FM·AM Change over
Muting OUT

■ LC7217 (IC101): PLL Synthesizer

(1) Internal Block Diagram

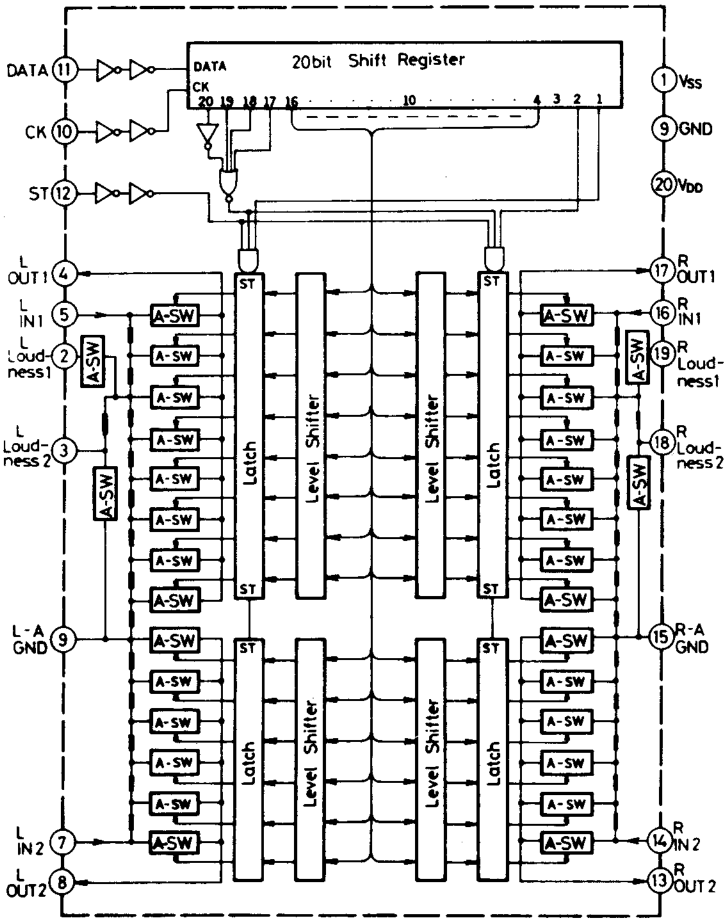

SYC
6
LC7217
XIN 1
XOUT 24
FM IN 19
AM IN 18
CE 2
DI 3
CL 4
DO 5
Reference Divider
Phase Detector Charge Pump
21 PD1
22 PD2
1/2
SWALLOW counter 1 16, 1 17 4bit
12bit Programmable Divider
16 HCTR
15 LCTR
Shift Register Latch
Universal Counter
20 Vdd
23 Vss
9
10
11
12
13
14
17
7
8
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
IN0
IN1

(2) Pin Functions

Symbol	Pin No.	Details	Function	I/O
Xin Xout	1 24	X'tal OSC	·Crystal oscillator (7.2 MHz)	I O
FMIN	19	Local oscillator signal input	·FMIN is selected for serial data input: DV=1 is assigned. ·Input frequency is 10 ~ 130 MHz (125 mVrms min.). ·The signal passes through the built-in pre-scaler(1/2) and is transmitted to the swallow counter.	I
AMIN	18	Local oscillator signal input	·AMIN is selected for serial data input: DV=0 is assigned. ·When serial data is input: SP=1 is assigned: ·Input frequency is 2 ~ 40 MHz (125 mVrms min.). ·The signal is transmitted to the swallow counter without passing through the built-in pre-scaler(1/2). ·When serial data is input: SP=0 is assigned: ·Input frequency is 0.5 ~ 10 MHz (125 mVrms min.). ·The signal is transmitted directly to the 12-bit programmable divider.	I
PD1 PD2	21 22	Charge pump output	·PLL charge pump output. When the local oscillator signal frequency divided by N results in a frequency higher than the reference frequency, high level signals are output from PD1 and PD2. When it is lower than the reference frequency, low level signals are output.	O
$\overline{\text{SYC}}$	6	Controller clock	·This is the controller clock output pin and a 400 kHz signal (duty 66 %) is output after the power is turned ON.	O (N-ch open drain)
V dd	20	Power supply	·Power supply pin for LC7217. It supplies 4.5 ~ 6.5 V when the PLL circuit is activated.	-
V ss	23	Ground	·GND pin of LC7217.	-
CE	2	Chip enable	·This pin goes high when serial data is input (DI) to LC7217 or output from it.	I
CL	4	Clock	·This clock is used to synchronize data when serial data is input (DI) to or output (DO) from LC7217.	I
DI	3	Input data	·Input pin for serial data which is transmitted from the controller to LC7217. ·A total of 36 bits of data should be input for initialization.	I
DO	5	Output data	·Output pin for serial data transmitted from LC7217 to the controller. ·A total of 24 bits can be output from the internal shift register in synchronized with CL.	O (N-ch open drain)
$\overline{\text{OUT 0}}$ $\overline{\text{OUT 1}}$ $\overline{\text{OUT 2}}$ $\overline{\text{OUT 3}}$ $\overline{\text{OUT 4}}$ $\overline{\text{OUT 5}}$ $\overline{\text{OUT 6}}$	9 10 11 12 13 14 17	Output port	·Latches O0 ~ O6 of the serial data transmitted from the controller, and inverts the data to output it in parallel. ·$\overline{\text{OUT 0}}$ can outputs the time base for clock (8 Hz). (When TB = 1.) ·$\overline{\text{OUT 1}}$ and $\overline{\text{OUT 2}}$ are complementary outputs. ·$\overline{\text{OUT 0}}$, $\overline{\text{OUT 3}}$, $\overline{\text{OUT 4}}$, $\overline{\text{OUT 5}}$ and $\overline{\text{OUT 6}}$ are N-ch open drain outputs (up to 13 V).	O
IN 0 IN 1	7 8	Input port	·The data at input ports IN 0, IN 1 is converted from parallel to serial, and can be output from output pin DO.	I
HCTR	16	General purpose measurement signal input pin	·With serial data input: SC = 1, HCTR is selected. ·The signal is transmitted to the general-purpose counter (20-bit binary counter) via a 1/8 divider internally. For this, the value of the general-purpose counter becomes 1/8 of the actual frequency which is input to the HCTR pin. ·The measured results can be output from the MSB of the general-purpose counter via output pin DO.	I
LCTR	15	General purpose counter frequency input pin	·With serial data input: SC = 0, LCTR is selected. ·At this time, if serial data is input: SF = 1 ; ·The signal is transmitted directly to the general-purpose counter without passing through the internal 1/8 divider. ·If serial data is input SF = 0 ; ·Input frequency is 1 Hz ~ 20kHz (V IH = 0.7 V DD min., V IL = 0.3 V DD max.) ·The measurement periods of 1-cycle and 2-cycle can be selected; when 2-cycle is selected, the input frequency is 2 Hz ~ 20kHz. (GT = 1/0 : 2/1 period)	I

■ TC9177P (IC306): Analog Switch for Front Volume Control

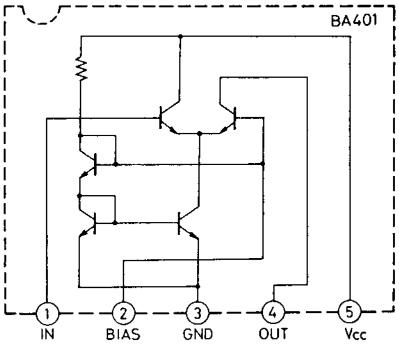
(1) Block Diagram


DATA 11
CK 10
ST 12
DATA
CK
20bit Shift Register
20 19 18 17 16 · · · 10 · · · 4 3 2 1
1 Vss
9 GND
20 VDD
L OUT1 4
L IN1 5
L Loud-ness1 2
L Loud-ness2 3
L-A GND 9
L IN2 7
L OUT2 8
R OUT1 17
R IN1 16
R Loud-ness1 19
R Loud-ness2 18
R-A GND 15
R IN2 14
R OUT2 13
A-SW
ST
Latch
Level Shifter

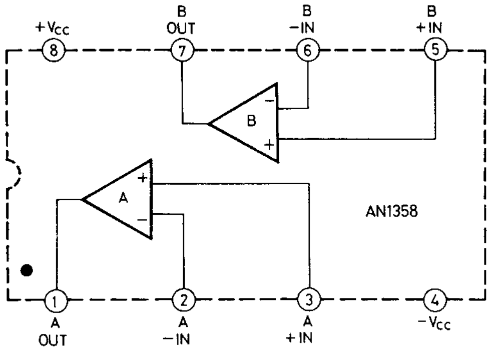
(2) Pin Functions

Pin No.	Symbol	Function
1	V ss	(-)Power Supply
2	L Loudness1	Terminal for Loudness (L-ch)
3	L Loudness2	Terminal for Loudness (L-ch)
4	L-OUT1	10dB Step Attenuator Output
5	L-IN 1	10dB Attenuator Input
6	A GND	Ground (Power Supply)
7	L-IN 2	2dB Attenuator Input
8	L-OUT2	2dB Step Attenuator Output
9	GND	Ground (Signal)
10	CK	Clock Input
11	DATA	Data Input
12	ST	Strobe Input
13	R-OUT2	2dB Step Attenuator Output
14	R-IN 2	2dB Attenuator Input
15	A-GND	Ground (Power Supply)
16	R IN 1	10dB Attenuator Input
17	R-OUT1	10dB Step Attenuator Output
18	R-Loudness2	Terminal for Loudness (R-ch)
19	R-Loudness1	Terminal for Loudness (R-ch)
20	V dd	(+)Power Supply

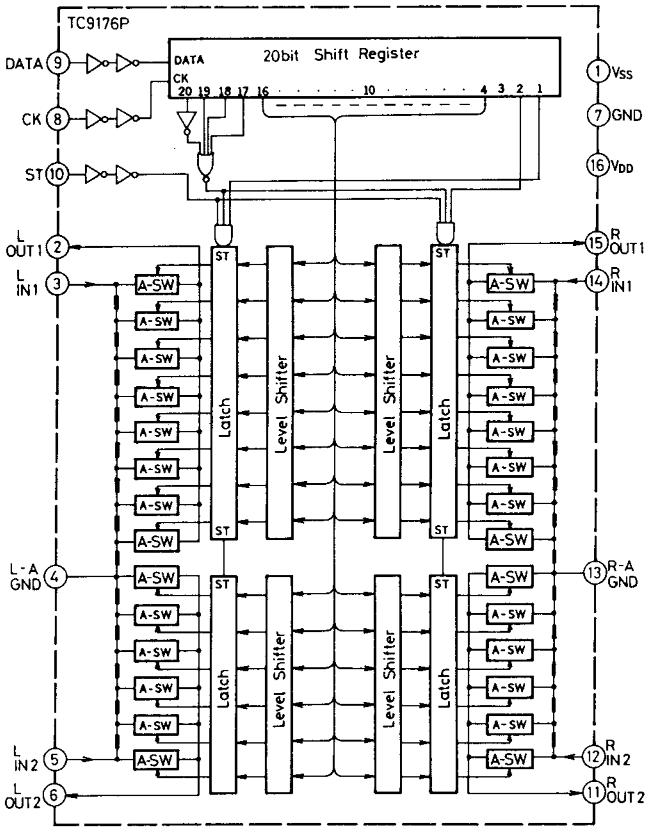
■ BA401 (IC104, IC105, IC106): IF Amp


BA401
① IN
② BIAS
③ GND
④ OUT
⑤ Vcc

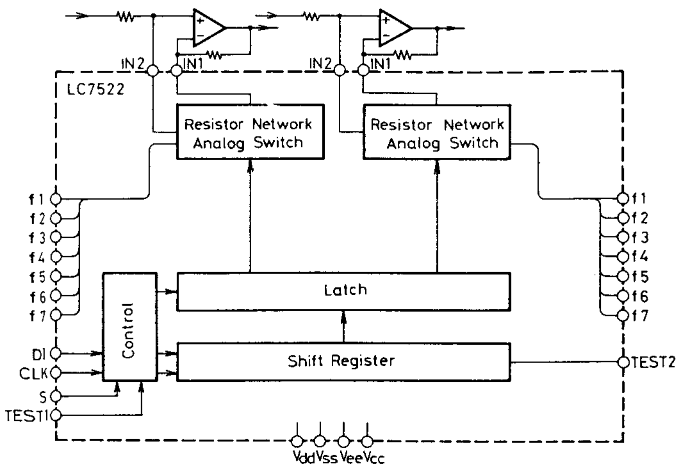
■ AN1358 (IC107): OP Amp

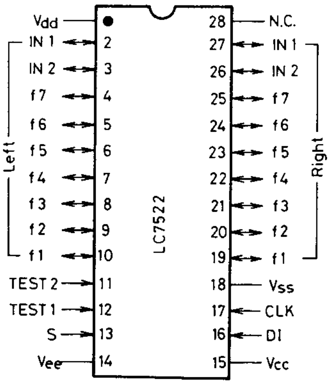

+Vcc ⑧
B OUT ⑦
B −IN ⑥
B +IN ⑤
B
A
AN1358
① A OUT
② A −IN
③ A +IN
④ −Vcc

■ TC9176P (IC542): Analog Switch for Rear Volume Control

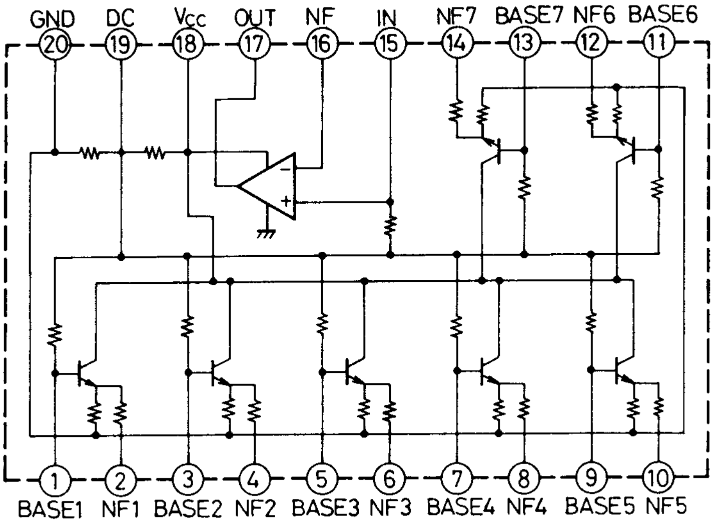

TC9176P
DATA ⑨
CK ⑧
ST ⑩
20bit Shift Register
DATA
CK
20 19 18 17 16 10 4 3 2 1
① Vss
⑦ GND
⑯ VDD
L OUT1 ②
L IN1 ③
L-A GND ④
L IN2 ⑤
L OUT2 ⑥
⑮ R OUT1
⑭ R IN1
⑬ R-A GND
⑫ R IN2
⑪ R OUT2
A-SW
ST
Latch
Level Shifter

■ LC7522 (IC504): SEA Volume Control

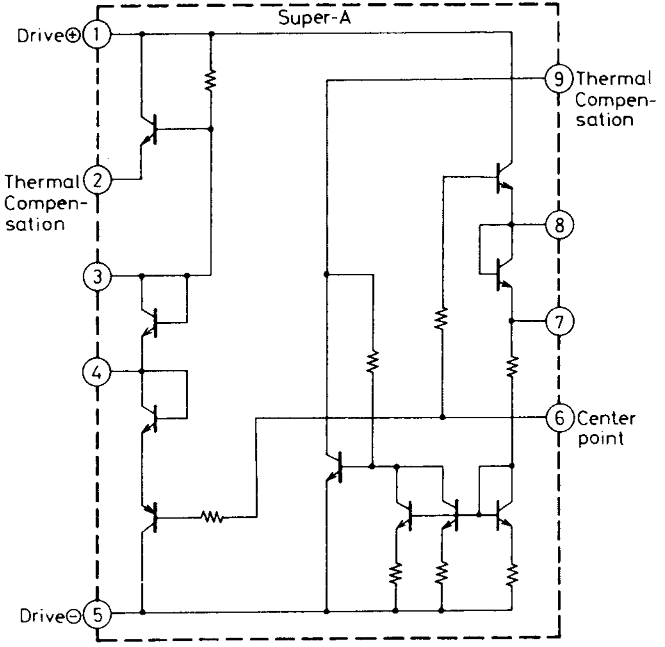

IN2
IN1
LC7522
Resistor Network Analog Switch
f1
f2
f3
f4
f5
f6
f7
DI
CLK
S
TEST1
Control
Latch
Shift Register
TEST2
Vdd Vss Vee Vcc


Vdd 1
IN 1 2
IN 2 3
f7 4
f6 5
f5 6
f4 7
f3 8
f2 9
f1 10
TEST2 11
TEST1 12
S 13
Vee 14
Left
LC7522
28 N.C.
27 IN 1
26 IN 2
25 f7
24 f6
23 f5
22 f4
21 f3
20 f2
19 f1
18 Vss
17 CLK
16 DI
15 Vcc
Right

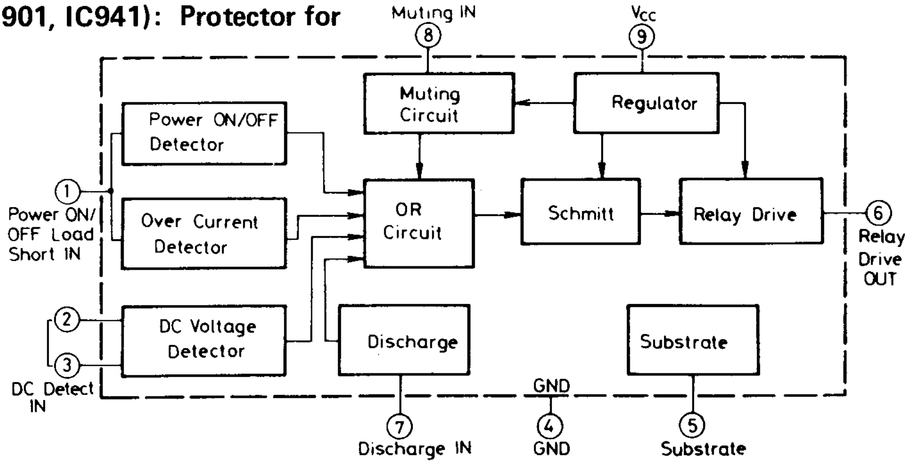
- **LA3607S (IC501, IC502): 7-elements Electrical Equalizer**


GND
DC
Vcc
OUT
NF
IN
NF7
BASE7
NF6
BASE6
20
19
18
17
16
15
14
13
12
11
1
2
3
4
5
6
7
8
9
10
BASE1
NF1
BASE2
NF2
BASE3
NF3
BASE4
NF4
BASE5
NF5

- **VC5022-2 (IC701, IC702): Super-A Bias Controller**

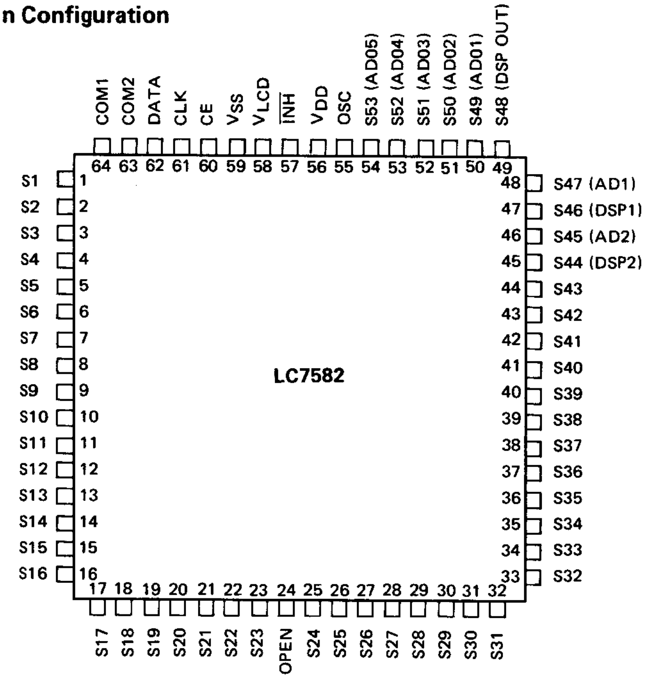

Super-A
Drive⊕
1
9
Thermal Compen-sation
Thermal Compen-sation
2
8
3
7
4
6
Center point
Drive⊖
5

- **TA7317P (IC901, IC941): Protector for Amplifier**


Muting IN
8
Vcc
9
Muting Circuit
Regulator
Power ON/OFF Detector
1
Power ON/OFF Load Short IN
Over Current Detector
OR Circuit
Schmitt
Relay Drive
6
Relay Drive OUT
2
DC Voltage Detector
3
DC Detect IN
Discharge
Substrate
GND
7
Discharge IN
4
GND
5
Substrate

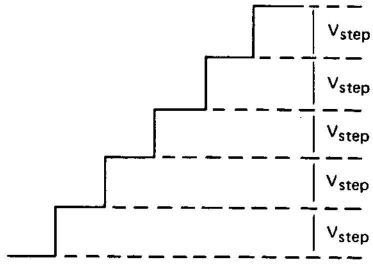
■ LC7582 (IC401): LCD Driver for Volume, SEA and Surround

(1) Pin Configuration

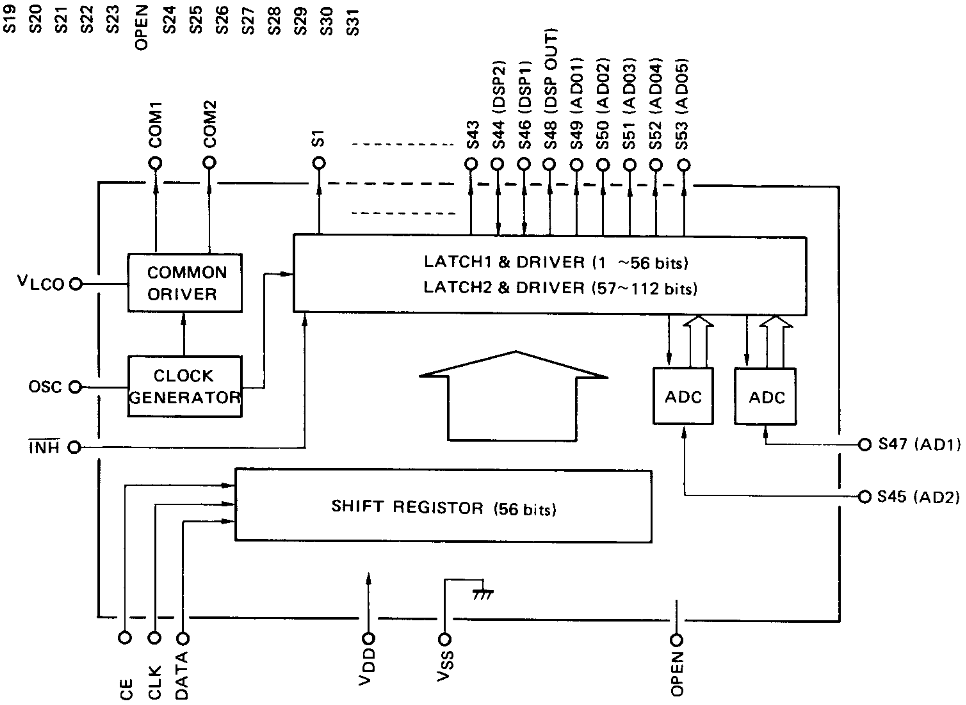

COM1
COM2
DATA
CLK
CE
VSS
VLCD
INH
VDD
OSC
S53 (AD05)
S52 (AD04)
S51 (AD03)
S50 (AD02)
S49 (AD01)
S48 (DSP OUT)
64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49
S1 1
S2 2
S3 3
S4 4
S5 5
S6 6
S7 7
S8 8
S9 9
S10 10
S11 11
S12 12
S13 13
S14 14
S15 15
S16 16
LC7582
48 S47 (AD1)
47 S46 (DSP1)
46 S45 (AD2)
45 S44 (DSP2)
44 S43
43 S42
42 S41
41 S40
40 S39
39 S38
38 S37
37 S36
36 S35
35 S34
34 S33
33 S32
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
S17
S18
S19
S20
S21
S22
S23
OPEN
S24
S25
S26
S27
S28
S29
S30
S31

(2) Step Voltage Differential

Input voltage of S45(AD2) and S47(AD1)


Vstep
Vstep
Vstep
Vstep
Vstep

(3) Block Diagram

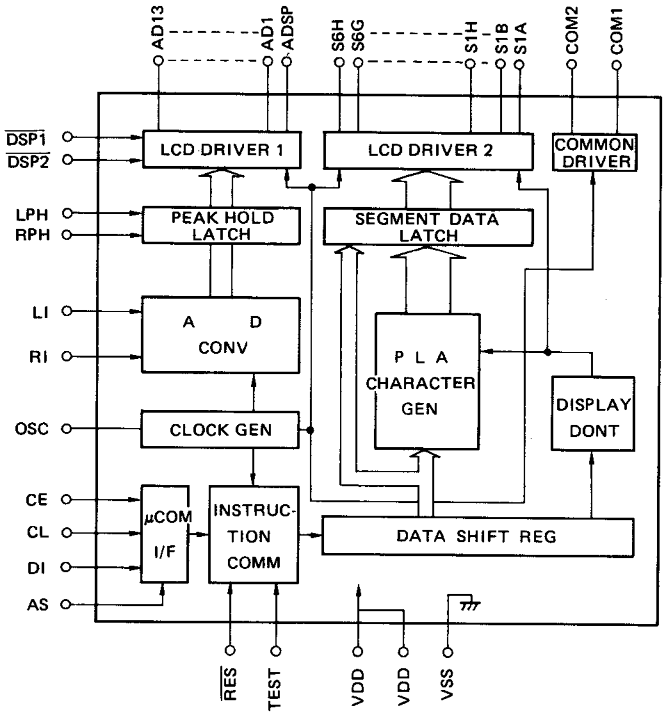

COM1
COM2
S1
S43
S44 (DSP2)
S46 (DSP1)
S48 (DSP OUT)
S49 (AD01)
S50 (AD02)
S51 (AD03)
S52 (AD04)
S53 (AD05)
VLCO
COMMON ORIVER
LATCH1 & DRIVER (1 ~56 bits)
LATCH2 & DRIVER (57~112 bits)
OSC
CLOCK GENERATOR
ADC
ADC
INH
S47 (AD1)
S45 (AD2)
SHIFT REGISTOR (56 bits)
CE
CLK
DATA
VDD
VSS
OPEN

(4) Terminal Description

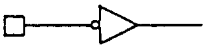
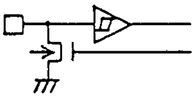
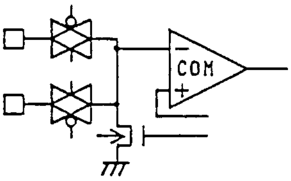
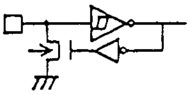
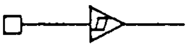
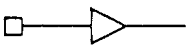
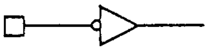
• S1 ~ S43	:	Segment output terminals
• S46(DSP1), S44(DSP2)	:	Segment output or DSP input terminals
• S47(AD1), S45(AD2)	:	Segment output or AD input terminals
• S48(DSPOUT)	:	Segment output or ADS output terminal
• S49 ~ S53 (AD0 ~ 5)	:	Segment output or AD output terminals
• COM1, 2	:	Common output terminals (Only COM 1 is used at the time of 1/1 duty, at which time COM 2 is open)
• V_{LCD}	:	LCD bias voltage setting terminal
• OSC	:	Oscillator terminal
• CE, CLK, DATA	:	Input terminals for serial data transmission
• V_{SS}, V_{DD}	:	Power supply terminals
• $\overline{INH}$	:	Input terminal for extinguishing and lighting the display (Effective only for the output driver. Therefore, serial data can be sent during extinguishing and lighting)
• OPEN	:	Unconnected

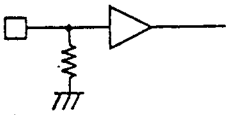
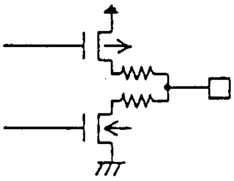
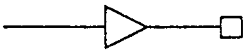
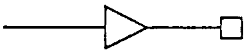
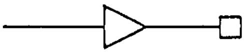
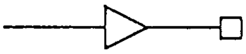
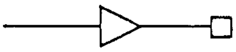
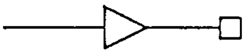
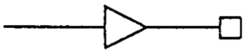
■ LC7584-871 (IC462): LCD Driver for Character

(1) Block Diagram


AD13
AD1
ADSP
S6H
S6G
S1H
S1B
S1A
COM2
COM1
$\overline{DSP1}$
$\overline{DSP2}$
LPH
RPH
LI
RI
OSC
CE
CL
DI
AS
LCD DRIVER 1
LCD DRIVER 2
COMMON DRIVER
PEAK HOLD LATCH
SEGMENT DATA LATCH
A D CONV
P L A CHARACTER GEN
DISPLAY DONT
CLOCK GEN
μCOM I/F
INSTRUCTION COMM
DATA SHIFT REG
$\overline{RES}$
TEST
VDD
VDD
VSS

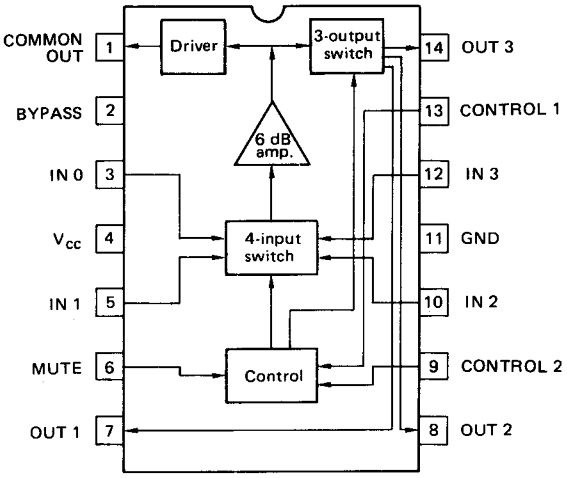
(2) Terminal Description

<table>
<tr><th>Terminal Name</th><th>Pin No.</th><th>Terminal Type</th><th>Description</th></tr>
<tr><td>$\overline{DSP1}$
$\overline{DSP2}$</td><td>36
38</td><td></td><td>• Input terminals for direct (external input display. The segment output is output from SDSP.
COM1: $\overline{DSP1}$ COM2: $\overline{DSP2}$</td></tr>
<tr><td>LPH
RPH</td><td>27
28</td><td></td><td>• C and R connection terminals which determine the peak hold reset time of the level meter display.</td></tr>
<tr><td>LI
RI</td><td>37
39</td><td> </td><td>• Input terminals of the AD converter. Full scale is achieved with (31/48) VDD.</td></tr>
<tr><td>OSC</td><td>29</td><td></td><td>• External C and R connection terminal for the oscillator.</td></tr>
<tr><td>CE
CL
CI</td><td>33
34
35</td><td></td><td>• Serial data transmission interface terminals.
CE: Chip enable
CL: Synchronous clock
DI: Transmission data</td></tr>
<tr><td>AS</td><td>30</td><td></td><td>• Address select terminal when two unis are used.
<table>
<tr><th>AS Terminal</th><th colspan="4">Address</th><th>Hex Code</th></tr>
<tr><th></th><th>A0</th><th>A1</th><th>A2</th><th>A3</th><th></th></tr>
<tr><td>L</td><td>0</td><td>0</td><td>1</td><td>0</td><td>4</td></tr>
<tr><td>H</td><td>1</td><td>0</td><td>1</td><td>0</td><td>5</td></tr>
</table></td></tr>
<tr><td>$\overline{RES}$</td><td>32</td><td></td><td>• This terminal forces the display off and on at the initialization condition. (Resets the LSI) The lighting is performed by serial data command from the microcomputer.</td></tr>
</table>

Terminal Name	Pin No.	Terminal Type	Description
TEST	40		• Used open or with VSS.
V_{DD}	31 73		• Power supply terminals. They supply 4.0 to 5.5 V.
V_{SS}	26		• Ground terminal
COM1 COM2	41 42		• LCD common drivers with a frame frequency of $\frac{fosc}{1024}$ Hz.
S1A ~ S1H	43 ~ 50		• LCD segment drivers. < for the first digit >
S2A ~ S2H	51 ~ 58		• LCD segment drivers. < for the second digit >
S3A ~ S3H	59 ~ 66		• LCD segment drivers. < for the third digit >
S4A ~ S4H	67 ~ 75		• LCD segment drivers. < for the fourth digit >
S5A ~ S5E S5F ~ S5H	76 ~ 80 1 ~ 3		• LCD segment drivers. < for the fifth digit >
S6A ~ S6H	1 ~ 11		• LCD segment drivers. < for the sixth digit >
SDSP	12		• LCD segment driver. < for direct ($\overline{DSP1}$ and $\overline{DSP2}$) display >
AD1~AD13	13 ~ 25		• LCD segment drivers. < for AD converter level display > AD1 is the lowest level and AD13 is the highest level.

■ LA7951 (IC544): 4 input-4 output Video Switch/6 dB Video Amp.

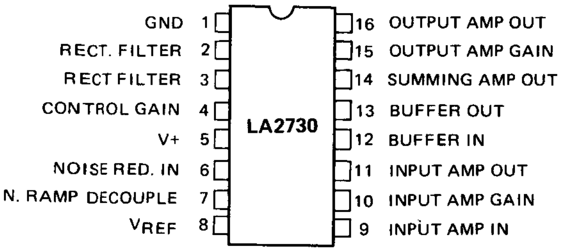
(1) Equivalent Circuit Block Diagram

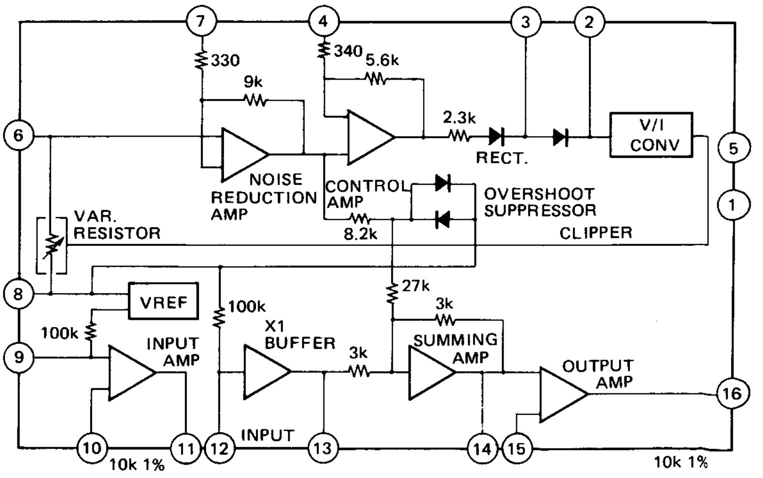

COMMON OUT
1
BYPASS
2
IN 0
3
V_{cc}
4
IN 1
5
MUTE
6
OUT 1
7
Driver
3-output switch
6 dB amp.
4-input switch
Control
14
OUT 3
13
CONTROL 1
12
IN 3
11
GND
10
IN 2
9
CONTROL 2
8
OUT 2

(2) Positive Logic Value Table

CONTROL			IN				OUT			
MUTE (6 pin)	1 (13 pin)	2 (9 pin)	0 (3 pin)	1 (5 pin)	2 (10 pin)	3 (12 pin)	COMMON (1 pin)	1 (7 pin)	2 (8 pin)	3 (14 pin)
L	–	–	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
H	L	L	ON	OFF	OFF	OFF	ON	ON	ON	ON
H	L	H	OFF	ON	OFF	OFF	ON	OFF	ON	ON
H	H	L	OFF	OFF	ON	OFF	ON	ON	OFF	ON
H	H	H	OFF	OFF	OFF	ON	ON	ON	ON	OFF

■ LA2730 (IC606): Dolby "B" Noise Reduction


GND 1
RECT. FILTER 2
RECT FILTER 3
CONTROL GAIN 4
V+ 5
NOISE RED. IN 6
N. RAMP DECOUPLE 7
VREF 8
LA2730
16 OUTPUT AMP OUT
15 OUTPUT AMP GAIN
14 SUMMING AMP OUT
13 BUFFER OUT
12 BUFFER IN
11 INPUT AMP OUT
10 INPUT AMP GAIN
9 INPUT AMP IN

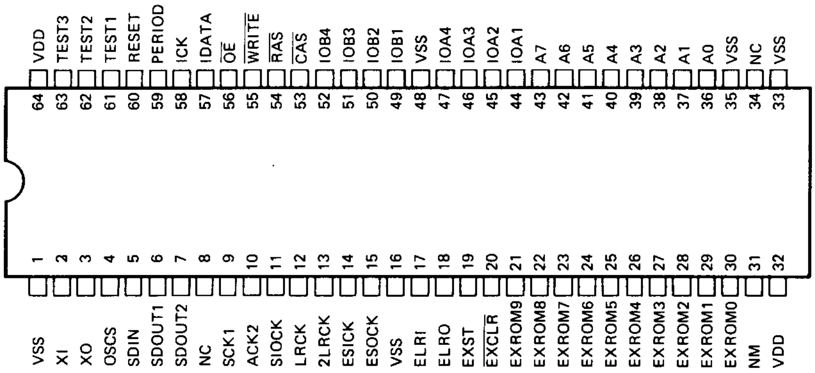

7
4
3
2
330
340
5.6k
9k
6
2.3k
V/I CONV
5
RECT.
NOISE REDUCTION AMP
CONTROL AMP
OVERSHOOT SUPPRESSOR
1
VAR. RESISTOR
8.2k
CLIPPER
8
VREF
27k
3k
100k
X1 BUFFER
SUMMING AMP
9
100k
INPUT AMP
3k
OUTPUT AMP
16
INPUT
10
11
12
13
14
15
10k 1%
10k 1%

■ VC4097-001 (IC601): Digital Audio Signal Processor

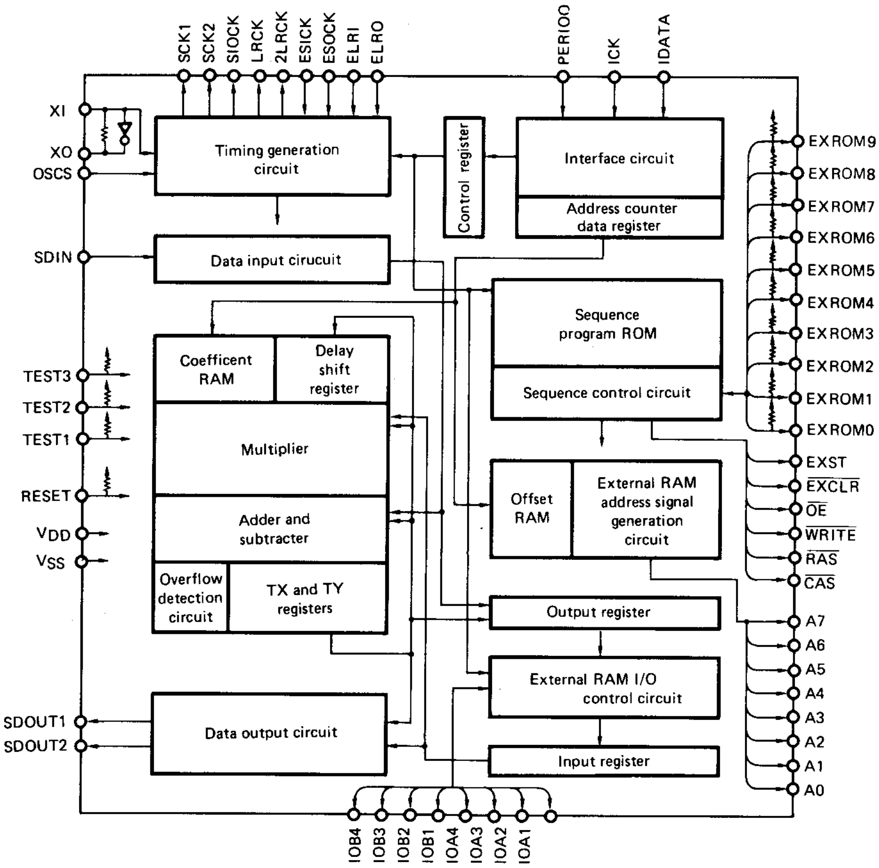
(1) General

The TC9330N is a single chip digital signal processor for accoustic applications, especially sound hall control. It permits a high-quality, high-accuracy digital delay which is not possible in analog delay systems as well as writing and reading of data. The high throughput which simultaneously executes multiplication and addition computations allows all types of AV digital surround. Also, natural reverberation such as that of halls, stages, and stadiums can be simulated by fold-in computations of inicially reflected sounds and reverberation computations.

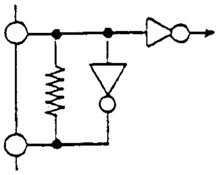
(2) Pin Configuration


64 VDD
63 TEST3
62 TEST2
61 TEST1
60 RESET
59 PERIOD
58 ICK
57 IDATA
56 OE
55 WRITE
54 RAS
53 CAS
52 IOB4
51 IOB3
50 IOB2
49 IOB1
48 VSS
47 IOA4
46 IOA3
45 IOA2
44 IOA1
43 A7
42 A6
41 A5
40 A4
39 A3
38 A2
37 A1
36 A0
35 VSS
34 NC
33 VSS
1 VSS
2 XI
3 XO
4 OSCS
5 SDIN
6 SDOUT1
7 SDOUT2
8 NC
9 SCK1
10 ACK2
11 SIOCK
12 LRCK
13 2LRCK
14 ESICK
15 ESOCK
16 VSS
17 ELRI
18 ELRO
19 EXST
20 EXCLR
21 EXROM9
22 EXROM8
23 EXROM7
24 EXROM6
25 EXROM5
26 EXROM4
27 EXROM3
28 EXROM2
29 EXROM1
30 EXROM0
31 NM
32 VDD

(3) Block Diagram


SCK1
SCK2
SIOCK
LRCK
2LRCK
ESICK
ESOCK
ELRI
ELRO
PERIOD
ICK
IDATA
XI
XO
OSCS
SDIN
TEST3
TEST2
TEST1
RESET
VDD
VSS
SDOUT1
SDOUT2
Timing generation circuit
Data input cirucuit
Coefficent RAM
Delay shift register
Multiplier
Adder and subtracter
Overflow detection circuit
TX and TY registers
Data output circuit
Control register
Interface circuit
Address counter data register
Sequence program ROM
Sequence control circuit
Offset RAM
External RAM address signal generation circuit
Output register
External RAM I/O control circuit
Input register
EXROM9
EXROM8
EXROM7
EXROM6
EXROM5
EXROM4
EXROM3
EXROM2
EXROM1
EXROM0
EXST
EXCLR
OE
WRITE
RAS
CAS
A7
A6
A5
A4
A3
A2
A1
A0
IOB4
IOB3
IOB2
IOB1
IOA4
IOA3
IOA2
IOA1

(4) Pin Functions

Pin No	Simbol	I/O	Functional Description	Remarks
1	VSS	–	Ground pin.	
2	XI	I	Crystal oscillator connection pin. Or, supplies a clock to the XI pin from the outside. Return resistor built in.	
3	XO	O		
4	OSCS	I	Oscillation/external clock frequency switching pin.	
5	SDIN	I	L ch. and R ch. serial data input pin.	Schmitt input
6	SDOUT1	O	L ch. and R ch. serial data output pins.	
7	SDOUT2	O		
8	NC	–	Unconnected pin.	
9	SCK1	O	Becomes the buffer output of the XI clock when OSCS is "L" and a divide-by-two output of the XI clock when OSCS is "H".	
10	SCK2	O	Becomes a divide-by-two output of the XI clock when OSCS is "L" and a divide-by-four output of the XI clock when OSCS is "H".	
11	SIOCK	O	Data shift clock output pin corresponding to the S/D converter and the D/A converter.	Internal oscillation mode.
12	LRCK	O	Channel clock output pin corresponding to the A/D converter and the D/A converter.	Same as above.
13	2LRCK	O	Clock output pin with double the frequency of LRCK.	Same as above.
14	ESICK	I	Shift clock input pin to read the L ch. and R ch. serial data.	External input mode Schmitt input.
15	ESOCK	I	Shift clock input pin to output the L ch. and R ch. serial data.	Same as above.
16	VSS	–	Ground pin.	
17	ELRI	I	Channel clock input pin corresponding to the L ch. and R ch. serial input data.	External input mode Schmitt input.
18	ELRO	I	Channel clock input pin corresponding to the L ch. and R ch. serial output data.	Same as above.
19	EXST	O	Program sequence ROM start pulse output pin.	Used in the external ROM mode.
20	$\overline{\text{EXCLR}}$	O	System clear signal output pin.	Same as above.
21	EXROM9	I	External ROM data input pin. Pull-up resistor built	Same as above.
22	EXROM8	I		
23 ≀ 30	EXROM7 ≀ EXROH0	I/O	External ROM data input pin. Becomes the output pin during tests. Pull-up resistor built in.	Used in the external ROM mode.
31	NC	–	Unconnected pin.	
32	VDD	–	Supply pin.	
33	VSS	–	Ground pin.	
34	NC	–	Unconnected pin.	
35	VDD	–	Ground pin.	
36 ≀ 43	A0 ≀ A7	O	Address output pin of the externally connected DRAM.	
44 ≀ 47 49 ≀ 52	IOA1 ≀ IOA4 IOB1 ≀ IOB4	I/O	Data input pin of the externally connected DRAM. Only IOA1 through IOA4 are used in the four-times access mode.	
48	VSS	–	Ground pin.	
53	$\overline{\text{CAS}}$	O	Column address strobe output pin of the externally connected DRAM.	
54	$\overline{\text{RAS}}$	O	Low address strobe output pin of the externally connected DRAM.	

Pin No	Simbol	I/O	Functional Description	Remarks
55	$\overline{\text{WRITE}}$	O	Read/write pulse output pin of the externally connected DRAM.	
56	$\overline{\text{OE}}$	O	Output-enable pulse output pin of the externally connected DRAM.	
57	IDATA	I	Interface data input pin.	Schmitt input.
58	ICK	I	Interface clock input pin.	Same as above.
59	PERIOD	I	Interface period pulse input pin.	Same as above.
60	$\overline{\text{RESET}}$	I	Reset signal input pin. Pull-up resistor built in.	
61 ≀ 63	TEST1 ≀ TEST3	I	Test pins. Use when normally "H" or at open. Pull-up resistor built in.	
64	VDD	–	Supply pin.	

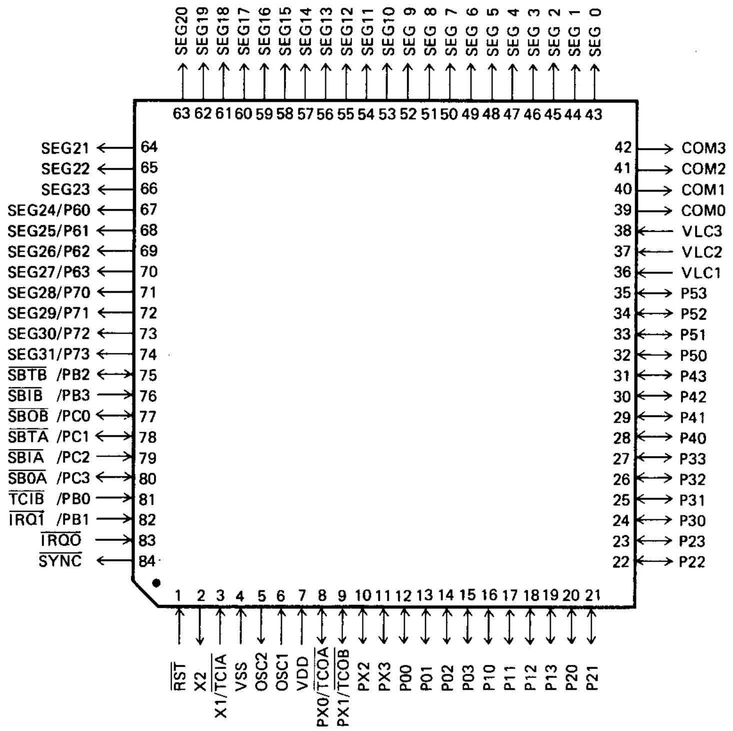
■ MN178611JSQ (IC402): LCD Control Microcomputer for D. AP

(1) Outline of the Functions

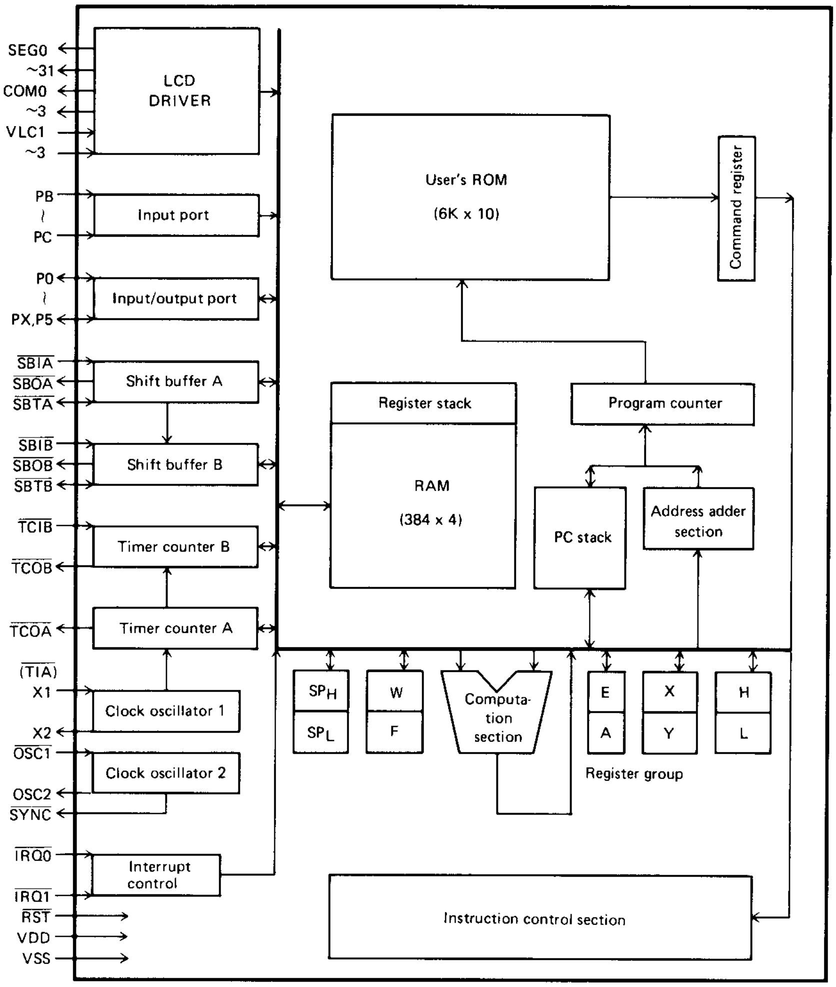
The MN178611JSQ is a high-speed, high performance CMOS 4-bit single-chip microcomputer with a built-in LCD drive circuit. It has 6K words of ROM and 384 words of RAM built in.

This microcomputer is also equipped with an internal input/output port for a wide range of applications, two 8-bit timer counters, two-8-bit shift buffers, a vector interrupt mechanism, LCD drive circuit, and a back-up mode.

(2) Pin Configuration


SEG20
SEG19
SEG18
SEG17
SEG16
SEG15
SEG14
SEG13
SEG12
SEG11
SEG10
SEG 9
SEG 8
SEG 7
SEG 6
SEG 5
SEG 4
SEG 3
SEG 2
SEG 1
SEG 0
63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43
SEG21 64
SEG22 65
SEG23 66
SEG24/P60 67
SEG25/P61 68
SEG26/P62 69
SEG27/P63 70
SEG28/P70 71
SEG29/P71 72
SEG30/P72 73
SEG31/P73 74
SBTB /PB2 75
SBIB /PB3 76
SBOB /PC0 77
SBTA /PC1 78
SBIA /PC2 79
SBOA /PC3 80
TCIB /PB0 81
IRQ1 /PB1 82
IRQ0 83
SYNC 84
42 COM3
41 COM2
40 COM1
39 COM0
38 VLC3
37 VLC2
36 VLC1
35 P53
34 P52
33 P51
32 P50
31 P43
30 P42
29 P41
28 P40
27 P33
26 P32
25 P31
24 P30
23 P23
22 P22
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
RST
X2
X1/TCIA
VSS
OSC2
OSC1
VDD
PX0/TCOA
PX1/TCOB
PX2
PX3
P00
P01
P02
P03
P10
P11
P12
P13
P20
P21

(3) Block Diagram


SEG0
~31
COM0
~3
VLC1
~3
LCD DRIVER
PB
PC
Input port
P0
PX,P5
Input/output port
SBIA
SBOA
SBTA
Shift buffer A
SBIB
SBOB
SBTB
Shift buffer B
TCIB
TCOB
Timer counter B
TCOA
Timer counter A
(TIA)
X1
X2
Clock oscillator 1
OSC1
OSC2
SYNC
Clock oscillator 2
IRQ0
IRQ1
Interrupt control
RST
VDD
VSS
User's ROM
(6K x 10)
Command register
Register stack
RAM
(384 x 4)
Program counter
PC stack
Address adder section
SPH
SPL
W
F
Computation section
E
A
X
Y
H
L
Register group
Instruction control section

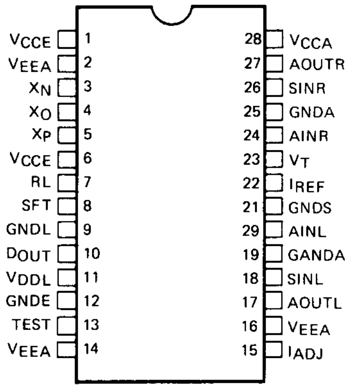
(4) Pin Functions

Symbol	Pin Name	Pin Function
VDD	Supply pin	Connects +3 V to +5 V.
VSS	Ground pin	Connects the ground (0 V)
OSC1	Oscillator pin	Connects a crystal or ceramic oscillation element. Can also be used as an external clock input pin.
OSC2	Oscillator pin	Connects a crystal or ceramic oscillation element. A feedback resistor is built in between this pin and OSC1.
X1 ($\overline{\text{TCIA}}$)	Oscillator pin for the clock	This is the evant counter input of timer counter A or the low-speed operation system clock input pin. The counting clock oscillation element is connected or the pin is used as an external clock input.
X2	Oscillation pin for the clock	Connects the counting clock oscillation element. A feedback resistor is built in between this pin and X1.
$\overline{\text{RST}}$	Reset signal input pin	The reset will function when an "L" level is input over one machine cycle. Connecting a capacitor between the pull-up resistor (mask option or externally connected) and GND will enable intial clearing.
$\overline{\text{SYNC}}$	Sync signal output pin	The internal timing signal $\overline{\text{CP3}}$ is output every machine cycle. "L" level duty is 1/4.
$\overline{\text{IRQ0}}$	Interrupt input pin	Program control interrupt will take effect when a negative edge signal is input.
PB1/$\overline{\text{IRQ1}}$	Interrupt input pin	Program control interrupt will take effect when a negative edge signal is input.
PB1/$\overline{\text{TCIB}}$	Timer counter input pin	This is the event count input pin of timer counter B.
PC1/$\overline{\text{SBTA}}$	Clock input/output pin for serial data	Becomes the output (input) pin when shift buffer A is in the internal (external) clock mode.
PC2/$\overline{\text{PBIA}}$	Serial data input pin	Eight-bit serial data is input to shift buffer A.

Symbol	Pin Name	Pin Function
PC3/$\overline{\text{SBOA}}$	Serial data output pin	In the send mode, 8-bit serial data is output from shift buffer A. When output is not being performed, the pin is high impedance.
PB2/$\overline{\text{SBTB}}$	Clock input/output pin for serial data	Becomes the output (input) pin when shift buffer B is in the internal (external) clock mode.
PB3/$\overline{\text{SBIB}}$	Serial data input pin	Eight-bit serial data is input to shift buffer B.
PC0/$\overline{\text{SBOB}}$	Serial data output pin	In the send mode, 8-bit serial data is output from shift buffer B. When output is not being performed, the pin is high impedance.
P00~P53 PX0~PX3	Parallel data input/output pin input/output pin	This is the 4-bit parallel data input/output port. The designation of input and output can be made by command in port units. Bit unit desifnations may also be made, but these are from P00 to P33. Eight-bit parallel data input/output is possible by pairing ports 0 & 1, 2 & 3 and 4 & 5. The input mode will be effective at reset time.
PB0~PC3	Parallel data input pin	This is the 4-bit parallel data input port.
PEG0~SEG31	LCD segment output pin	This is the LCD segment output pin. Each segment has a 4-bit data latch.
COM0~COM3	LCD common output pin pin	This is the LCD common output pin.
VLC1~VLC3	LCD power supply input pin	This is the input of the LCD power supply.
PX0/$\overline{\text{TCOA}}$	Timer output pin	This is the output pin of timer A. *1
PX1/$\overline{\text{TCOB}}$	Timer output pin	This is the output pin of timer B. *1

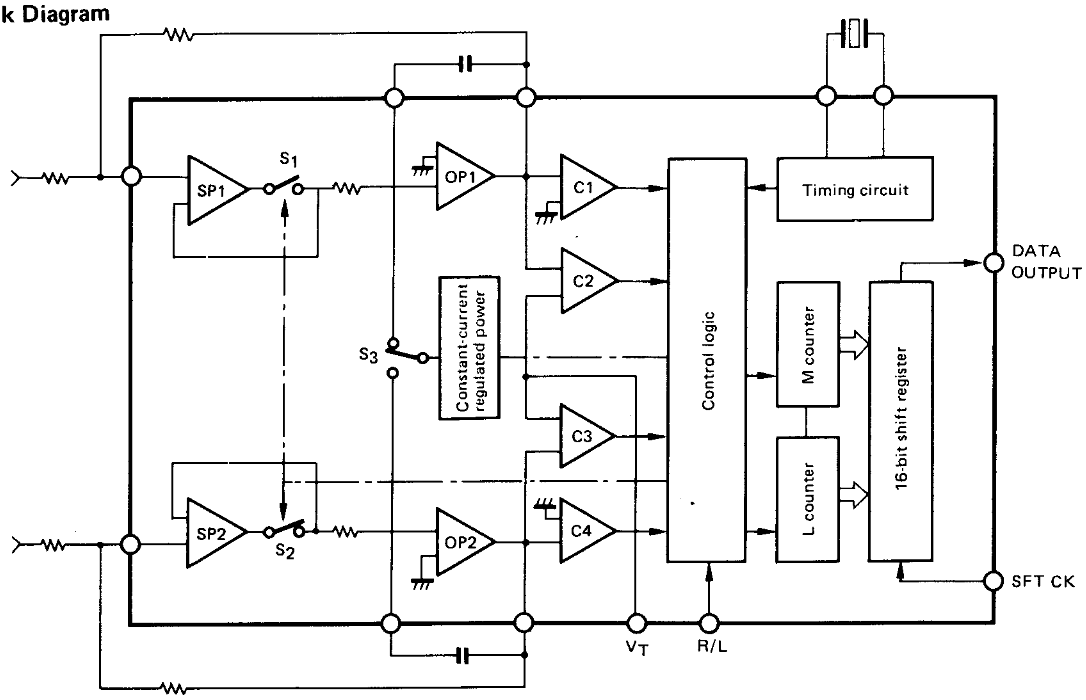
■ TD6704P (IC604): 16 bits A/D Converter

(1) Pin Configuration



VCCE 1
VEEA 2
XN 3
XO 4
XP 5
VCCE 6
RL 7
SFT 8
GNDL 9
DOUT 10
VDDL 11
GNDE 12
TEST 13
VEEA 14
28 VCCA
27 AOUTR
26 SINR
25 GNDA
24 AINR
23 VT
22 IREF
21 GNDS
29 AINL
19 GANDA
18 SINL
17 AOUTL
16 VEEA
15 IADJ

(2) Block Diagram



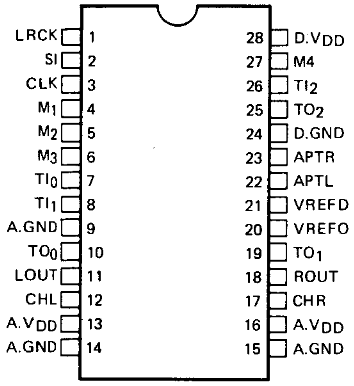
SP1
S1
OP1
C1
Timing circuit
C2
Constant-current regulated power
S3
Control logic
M counter
16-bit shift register
DATA OUTPUT
C3
L counter
SP2
S2
OP2
C4
SFT CK
VT
R/L

(3) Pin Function

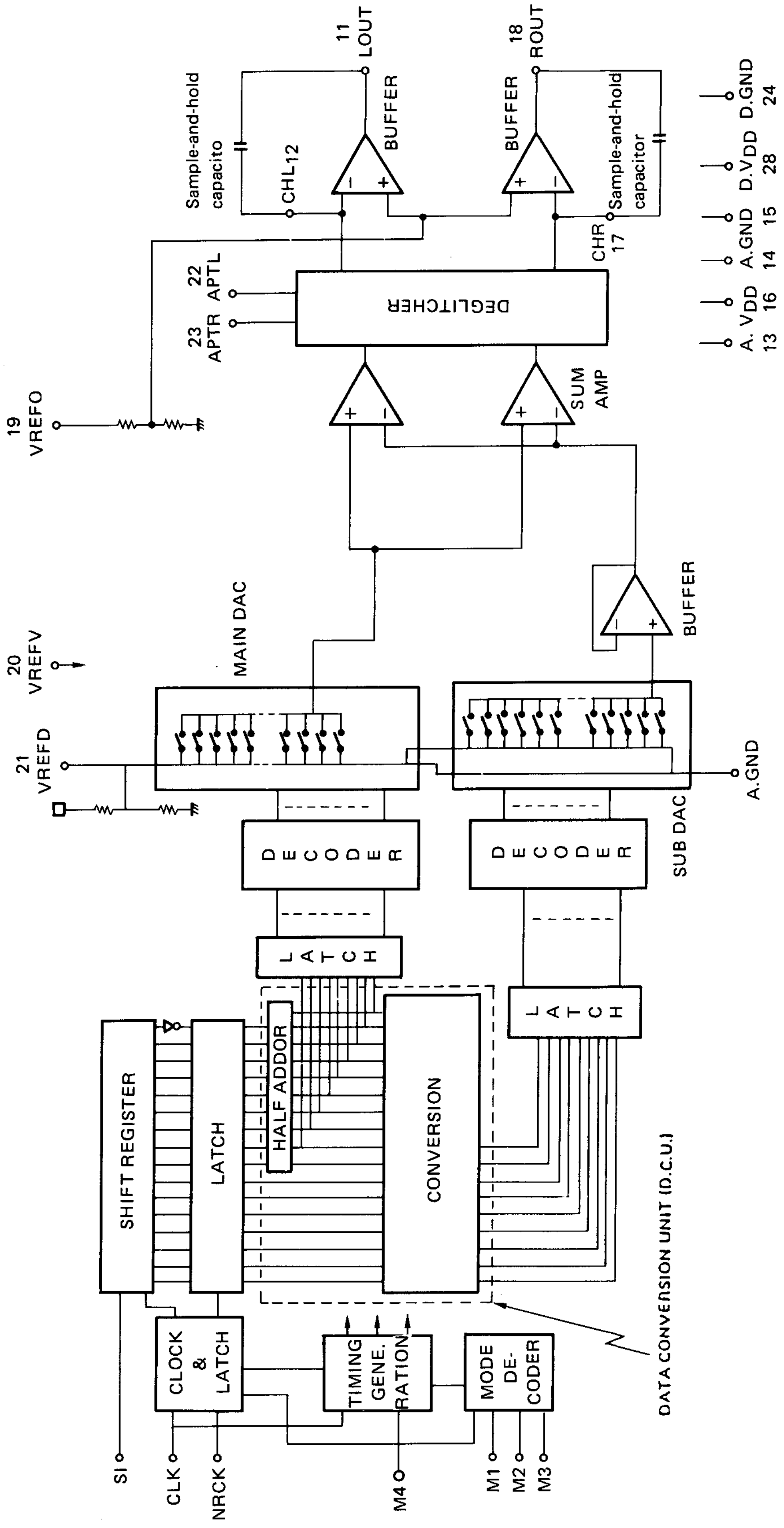
Pin No.	Symbol	Functional Description
1	V_{CCE}	Positive power supply pin of the ECL logic section. (5V)
2	V_{EEA}	Negative power supply pin of the analog section.
3	X_N	Oscillator pin Negative input
4	X_O	Oscillator pin Output
5	X_P	Oscillator pin Positive input
6	V_{CCE}	Positive power supply pin of the ECL logic section.
7	RL	This is the conversion operation switching signal input pin for the R ch. and the L ch. A sample hold is taken of the L ch. input at the rising edge and A/D conversion is performed during the "H" level period. Also, during this period the digital data of the R ch., which were previously converted, can be taken out as serial data.
8	SFT	This is a shift clock input pin used for taking out the converted digital data as serial data. To take out 16 bits while RL is "H" (or "L"), a frequency of 32 times RL is required.
9	GNDL	Ground pin of the TTL Logic section. (GND)
10	DOUT	Digiral data output pin. The data are synchronized with the fall of SFT and output from the MSB.
11	V_{DDL}	Positive power supply pin of the TTL logic section. (5 V)
12	GNDE	Ground pin of the ECL logic section.
13	NC	Use open.
14	V_{EEA}	Negative power supply pin of the analog section.
15	I_{ADJ}	This is the current ratio adjustment pin. A 3KΩ variable resistor is placed between this pin and V_{EEA} to correctly set the ratio of the discharge current IM and IL to 128:1.
16	V_{EEA}	Negative power supply pin of the analog section. (−10 V)
17	AOUTL	This is the L ch. integrating amp output pin. A capacitor used for integration is connected between this pin and the input.
18	SINL	L ch. analog signal input pin.
19	GNDA	Ground pin of the analog section
20	AINL	Lch. integrating amp input pin.
21	GNDS	Analog signal ground pin.
22	I_{REF}	By setting the current that flows into the integrating reference current input pin I_{ref} (which is at ground potential) to I_{ref}, the double integration of IM = 41_{ref} and IL=1/32, I_{ref} will be performed.
23	V_T	This is the comparator reference voltage input pin. The integrating current will switch from IL when the integrator output and V_T are in agreement.
24	AINR	Rch. integrating amp input pin.
25	GNDA	Ground pin of the analog section.
26	SINR	R ch. analog signal input pin.
27	AOUTR	This is the R ch. integrator output pin. A capacitor used for integation is connected between this pin and the input.
28	V_{CCA}	Positive power supply pin of the analog section. (5 V)

■ μPD6355G (IC605): D/A Converter

(1) Pin Configuration


LRCK 1
SI 2
CLK 3
M1 4
M2 5
M3 6
TI0 7
TI1 8
A.GND 9
TO0 10
LOUT 11
CHL 12
A.VDD 13
A.GND 14
28 D.VDD
27 M4
26 TI2
25 TO2
24 D.GND
23 APTR
22 APTL
21 VREFD
20 VREFO
19 TO1
18 ROUT
17 CHR
16 A.VDD
15 A.GND

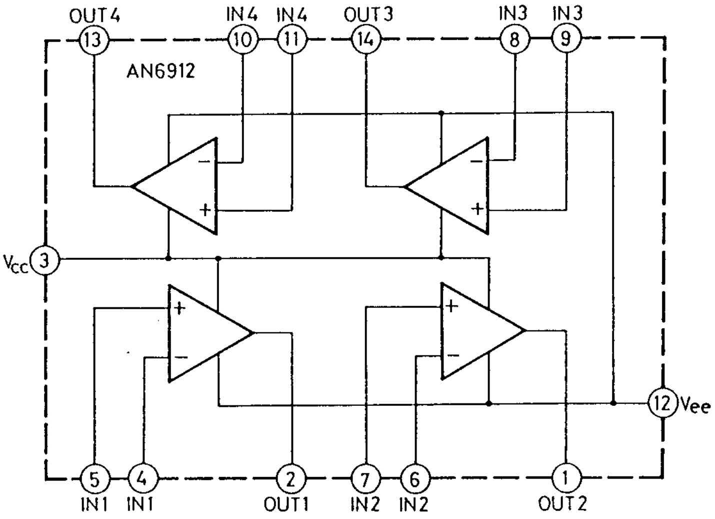
(2) Block Diagram


11 LOUT
18 ROUT
Sample-and-hold capacito
CHL12
BUFFER
BUFFER
Sample-and-hold capacitor
CHR 17
24 D.GND
28 D.VDD
15 A.GND
14 A.GND
16 A. VDD
13 A. VDD
22 APTL
23 APTR
DEGLITCHER
SUM AMP
19 VREFO
MAIN DAC
BUFFER
20 VREFV
21 VREFD
A.GND
DECODER
DECODER
SUB DAC
LATCH
LATCH
HALF ADDOR
SHIFT REGISTER
LATCH
CONVERSION
DATA CONVERSION UNIT (D.C.U.)
CLOCK & LATCH
TIMING GENE. RATION
MODE DE-CODER
SI
CLK
NRCK
M4
M1
M2
M3

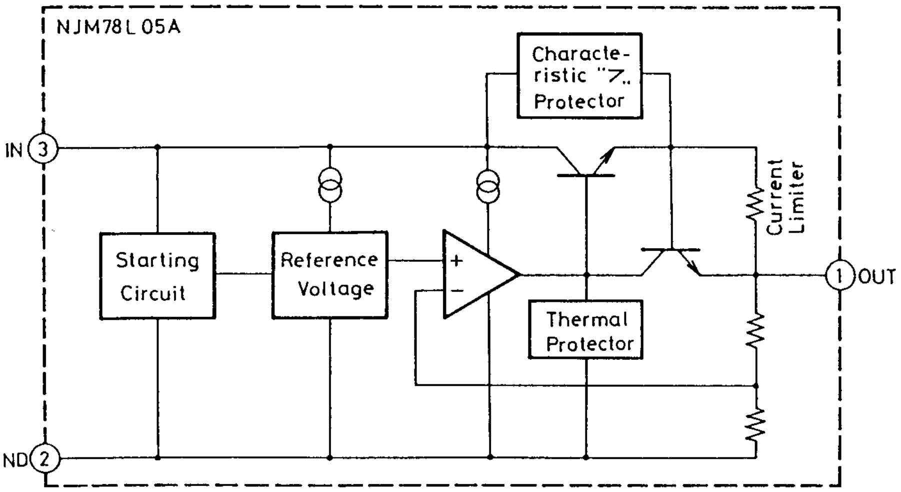
(3) Pin Function

Pin No.	Symbol	Pin Name	Description	Input/ Output
1	LRCK	Left/Right Clock	This is the input pin of the input data left-right discrimination signal. "L"=Left, "H"=Right	Input
2	SI	Series Input	Input pin of the serial data.	Input
3	CLK	CLOCK	Input pin of the serial input data read clock.	Input
4	M1	Mode 1	Mode switching pin of the input data.	Input
5	M2	Mode 2		
6	M3	Mode 3		
7	TI_0	Test Input 0	Test pins. These should normally be connected to A. AND.	Input
8	TI_1	Test Input 1		
9	A. GND	Analog GND	GND pin of the analog section.	
10	TO_0	Test Output 0	Test pin. This should normally be left open.	Output
11	LOUT	L—ch OUTPUT	This is the output of the left side analog signal.	Output
12	CHL	Hold Capacitance	This is the capacitor connection pin for the left channel analog signal sample hold. A capacitor is connected between this pin and the LOUT pin.	Output
13	A. V_{DD}	Analog V_{DD}	This is the supply pin to the analog section.	
14	A. GND	Analog GND	This is the GND pin of the analog section.	
15	A. GND	Analog GND		
16	A. V_{DD}	Analog V_{DD}	This is the supply pin to the analog section.	
17	CHR	Hold Capacitance R-ch	This is the capacitor connection pin for the right channel analog signal sample hold. A capacitor is connected between this pin and the ROUT pin.	Output
18	ROUT	R-ch OUTPUT	This is the output pin of the right side analog signal.	Output
19	VREFO	Voltage Reference	This pin is connected to the reference voltage of the OP amp. Normally, a connection is made to A. GND through a capacitor in order to lower the impedance at high frequencies.	
20	VREFV	Voltage Reference	This pin is normally connected to A. GND through a capacitor.	
21	VREFD	Voltage Reference	This pin is connected to a resistance string. Normally, a connection is made to A. GND through a capacitor in order to lower the impedance at high frequencies	
22	APTL	Apertur L-ch	This is the input pin of the timing signal which sample holds the analog output of the left side. (Active high.)	Input
23	APTR	Apertur R-ch	This is the input pin of the timing signal which sample holds the analog output of the right side. (Active high.)	Input
24	D. GND	Digital GND	This is the ground pin of the logic section.	
25	TO_2	Test Output 2	Test pin. This pin should normally be left open.	Output
26	TI_2	Test Input 2	Test pin. This pin should be connected to D. V_{DD}.	Input
27	M4	Mode 4	Selects the clock of the internal logic circuit. In more detail, this pin selects whether or not the signal input from the CLK pin is demultiplied internally. There is no demultiplication at high level and 1/2 demultiplication at low level.	Input
28	D, V_{DD}	Digital V_{DD}	This is the supply pin to the logic section.	

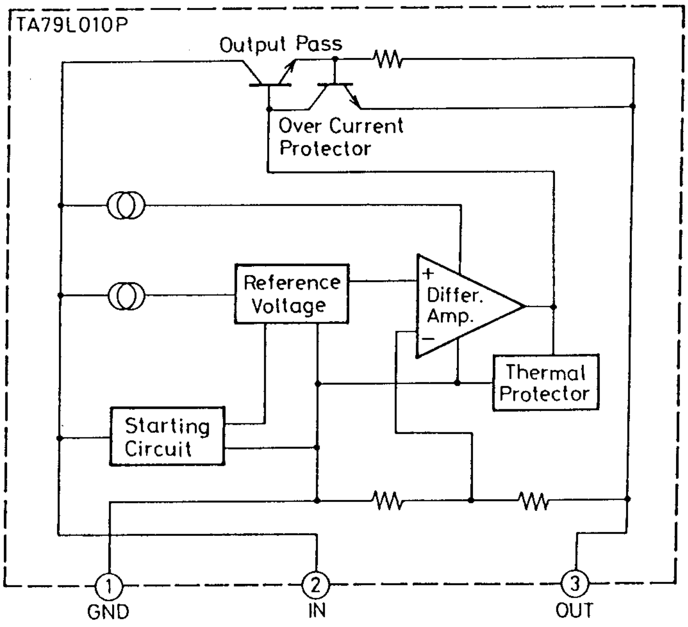
■ AN6912 (IC051): Op Amp.


OUT4
IN4
IN4
OUT3
IN3
IN3
13
10
11
14
8
9
AN6912
Vcc 3
12 Vee
−
+
+
−
5
4
2
7
6
1
IN1
IN1
OUT1
IN2
IN2
OUT2

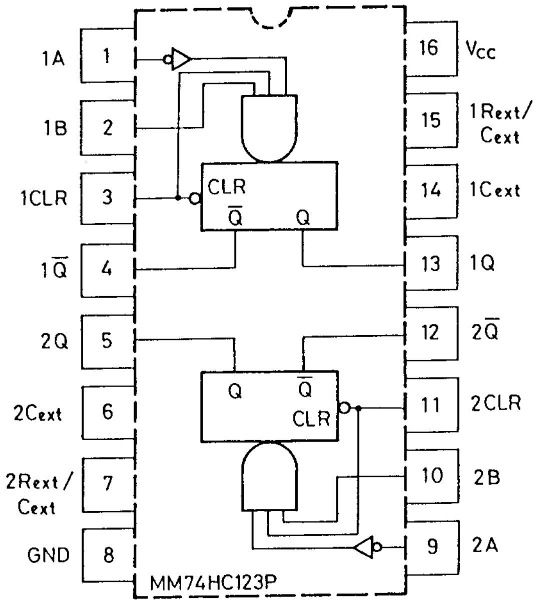
■ NJM78L05A (IC698): Regulator


NJM78L 05A
Characte-
ristic "Z..
Protector
IN 3
Current
Limiter
Starting
Circuit
Reference
Voltage
+
−
1 OUT
Thermal
Protector
GND 2

■ TA79L010P (IC699): Regulator

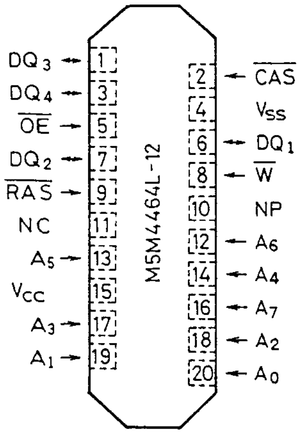

TA79L010P
Output Pass
Over Current
Protector
Reference
Voltage
+
Differ.
Amp.
−
Thermal
Protector
Starting
Circuit
1
2
3
GND
IN
OUT

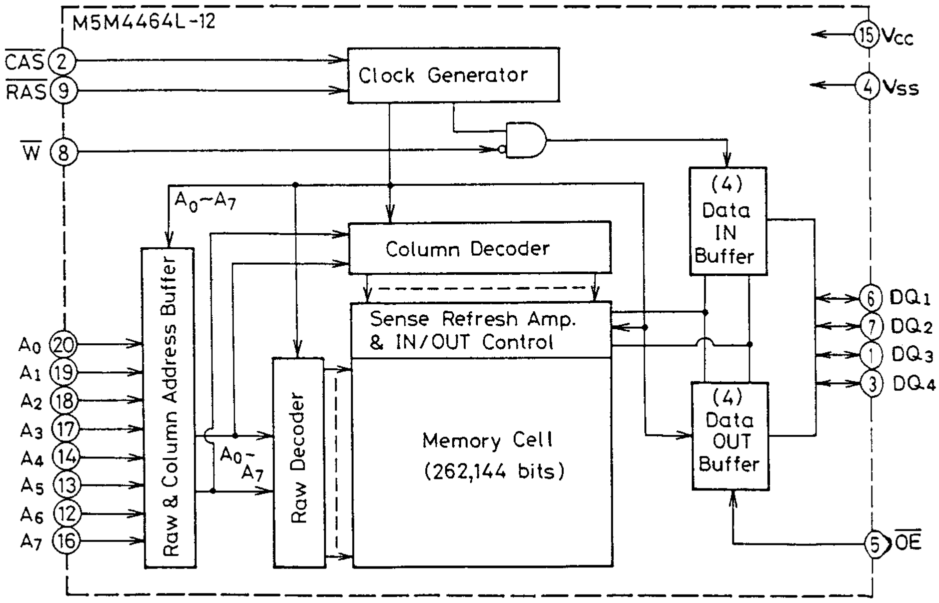
■ MM74HC123P (IC231): Multivibrator


1A
1
1B
2
1CLR
3
1Q̄
4
2Q
5
2Cext
6
2Rext/Cext
7
GND
8
16
Vcc
15
1Rext/Cext
14
1Cext
13
1Q
12
2Q̄
11
2CLR
10
2B
9
2A
CLR
Q̄
Q
Q
Q̄
CLR
MM74HC123P

Input			Output	
CLEAR	A	B	Q	Q̄
L	×	×	L	H
×	H	×	L	H
×	×	L	L	H
H	L	↑	⊓	⊔
H	↓	H	⊓	⊔
↑	L	H	⊓	⊔

■ M5M4464L-12 (IC602, 603): Dynamic RAM

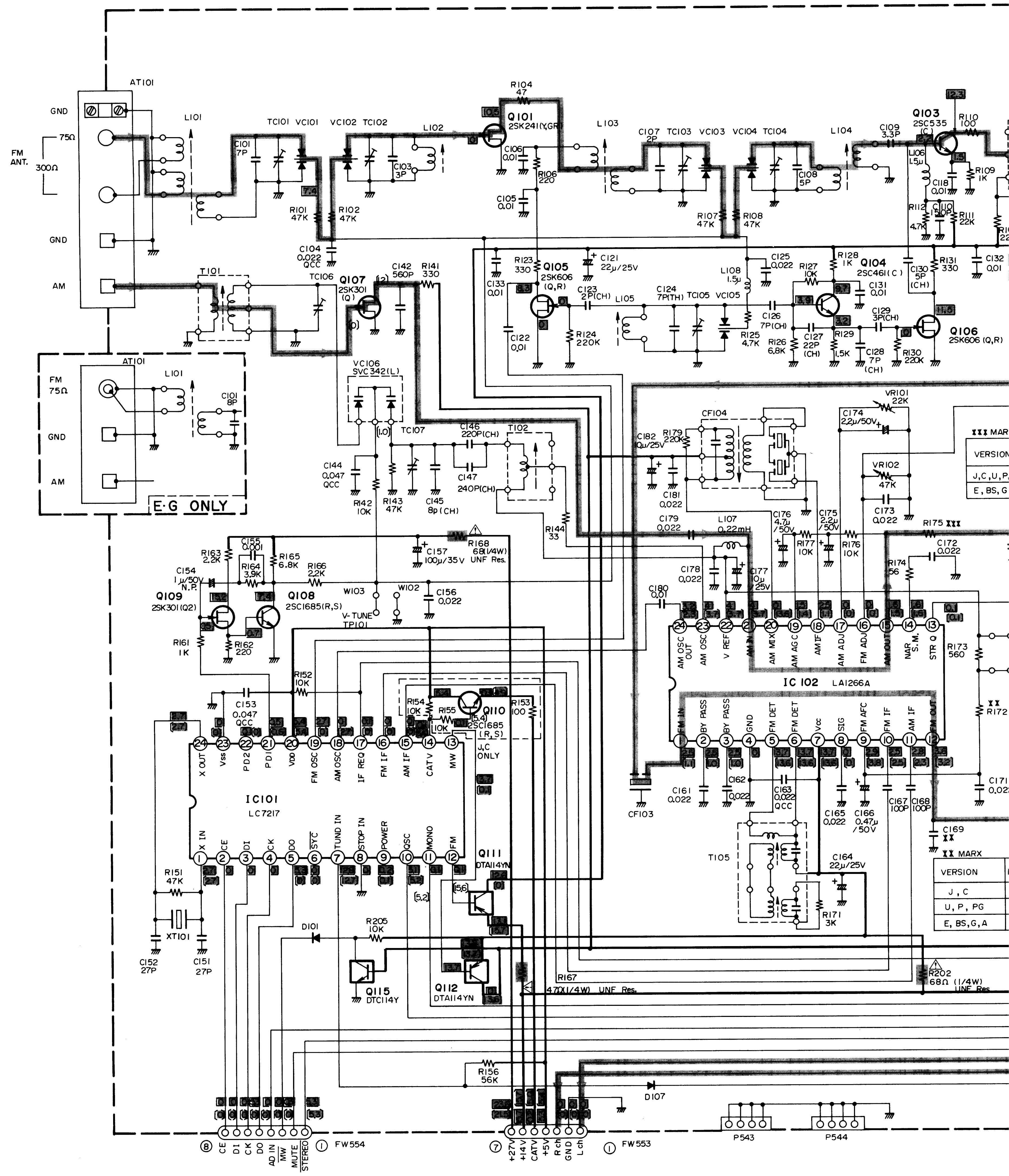

DQ3
DQ4
OE
DQ2
RAS
NC
A5
Vcc
A3
A1
1
3
5
7
9
11
13
15
17
19
M5M4464L-12
2
4
6
8
10
12
14
16
18
20
CAS
Vss
DQ1
W
NP
A6
A4
A7
A2
A0


M5M4464L-12
CAS 2
RAS 9
W 8
15 Vcc
4 Vss
Clock Generator
A0~A7
Column Decoder
(4) Data IN Buffer
Sense Refresh Amp. & IN/OUT Control
Raw & Column Address Buffer
Raw Decoder
Memory Cell (262,144 bits)
(4) Data OUT Buffer
A0 20
A1 19
A2 18
A3 17
A4 14
A5 13
A6 12
A7 16
A0~A7
6 DQ1
7 DQ2
1 DQ3
3 DQ4
5 OE

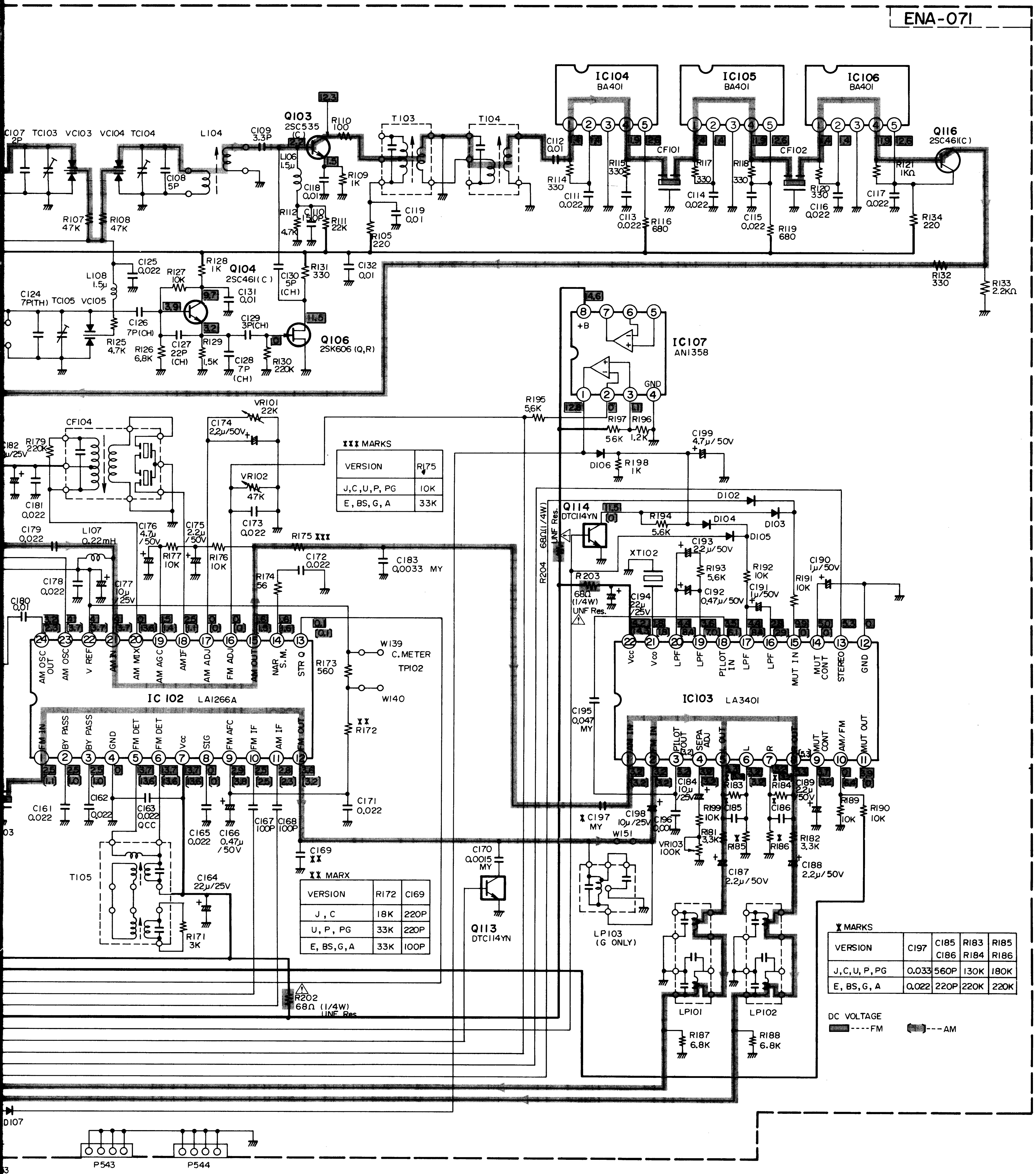
MEMO

Schematic Diagrams

(1) Tuner Section



AT101
GND
FM ANT.
75Ω
300Ω
AM
L101
TC101 VC101
VC102 TC102
L102
Q101 2SK241(Y,GR)
R104 47
L103
C107 TC103 VC103 VC104 TC104
L104
Q103 2SC535
R110 100
T101
TC106
Q107 2SK301(Q)
C142 560P
R141 330
Q105 2SK606 (Q,R)
L105
TC105 VC105
Q104 2SC461(C)
Q106 2SK606 (Q,R)
VC106 SVC342(L)
TC107
T102
E·G ONLY
CF104
VR101 22K
VR102 47K
Q109 2SK301(Q2)
Q108 2SC1685(R,S)
V-TUNE TP101
IC 102 LA1266A
IC101 LC7217
Q110 2SC1685 (R,S)
J,C ONLY
Q111 DTA114YN
Q112 DTA114YN
Q115 DTC114Y
XT101
T105
CF103
R202 68Ω (1/4W) UNF Res.
R168 68(1/4W) UNF Res.
D101
D107
R156 56K
FW554
FW553
P543
P544
CE DI CK DO AD IN MW MUTE STEREO
+27V +14V CATV +5V Rch GND Lch
VERSION
J,C
U,P,PG
E,BS,G,A


ENA-071
IC104 BA401
IC105 BA401
IC106 BA401
Q103 2SC535 (C)
Q104 2SC461 (C)
Q106 2SK606 (Q,R)
Q116 2SC461(C)
T103
T104
CF101
CF102
CF104
L104
L106 1.5μ
L107 0.22mH
L108 1.5μ
C107 2P
TC103
VC103
VC104
TC104
C108 5P
C109 3.3P
R110 100
R109 1K
R107 47K
R108 47K
C124 7P(TH)
TC105
VC105
R125 4.7K
R126 6.8K
R127 10K
R128 1K
R131 330
R132 330
R133 2.2KΩ
R134 220
IC107 AN1358
R195 5.6K
R197 56K
R196 1.2K
R198 1K
D106
C199 4.7μ/50V
D102
D103
D104
D105
Q114 DTC114YN
R194 5.6K
R203 68Ω (1/4W) UNF Res.
R204 68Ω(1/4W) UNF Res.
XT102
C194 22μ/25V
C195 0.047 MY
VR101 22K
VR102 47K
C174 2.2μ/50V
R175
R174 56
R173 560
R172
W139
C.METER
TP102
W140
IC 102 LA1266A
AM OSC OUT
AM OSC
V REF
AM IN
AM MIX
AM AGC
AM IF
AM ADJ
FM ADJ
AM OUT
NAR S.M.
STR Q
FM IN
BY PASS
BY PASS
GND
FM DET
FM DET
Vcc
SIG
FM AFC
FM IF
AM IF
FM OUT
T105
C164 22μ/25V
R171 3K
C170 0.0015 MY
Q113 DTC114YN
R202 68Ω (1/4W) UNF Res.
IC103 LA3401
Vcc
Vco
LPF
LPF
PILOT IN
LPF
LPF
MUT IN
MUT CONT
STEREO
GND
PILOT OUT
SEPA ADJ
OUT
L
R
MUT CONT
AM/FM
MUT OUT
C197 MY
C198 10μ/25V
W151
VR103 100K
LP103 (G ONLY)
C187 2.2μ/50V
C188 2.2μ/50V
LP101
LP102
R187 6.8K
R188 6.8K
D107
P543
P544

XXX MARKS

VERSION	R175
J,C,U,P, PG	10K
E, BS, G, A	33K

XX MARX

VERSION	R172	C169
J , C	18K	220P
U, P, PG	33K	220P
E, BS, G, A	33K	100P

X MARKS

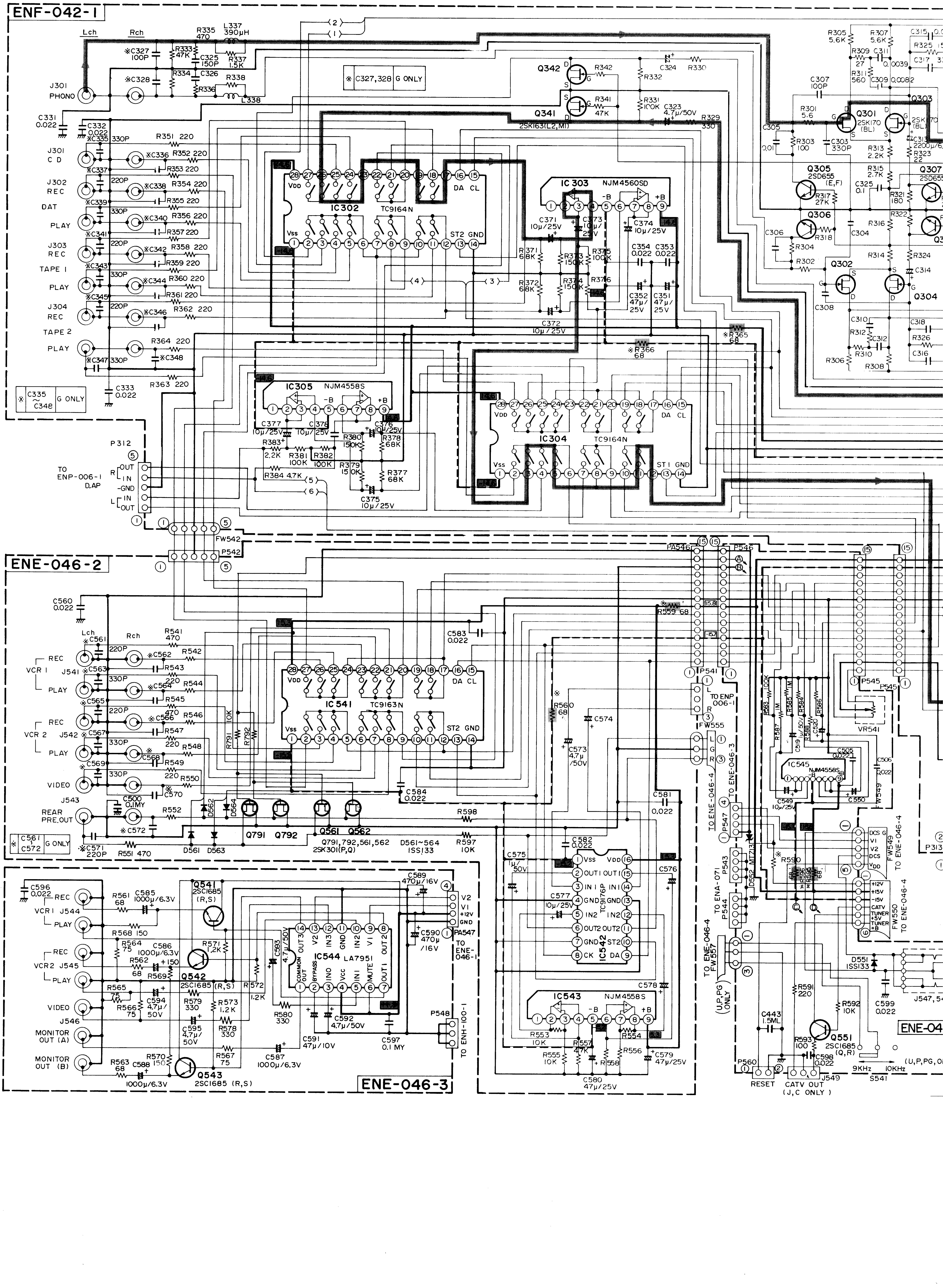
VERSION	C197	C185 C186	R183 R184	R185 R186
J, C, U, P, PG	0.033	560P	130K	180K
E, BS, G, A	0.022	220P	220K	220K

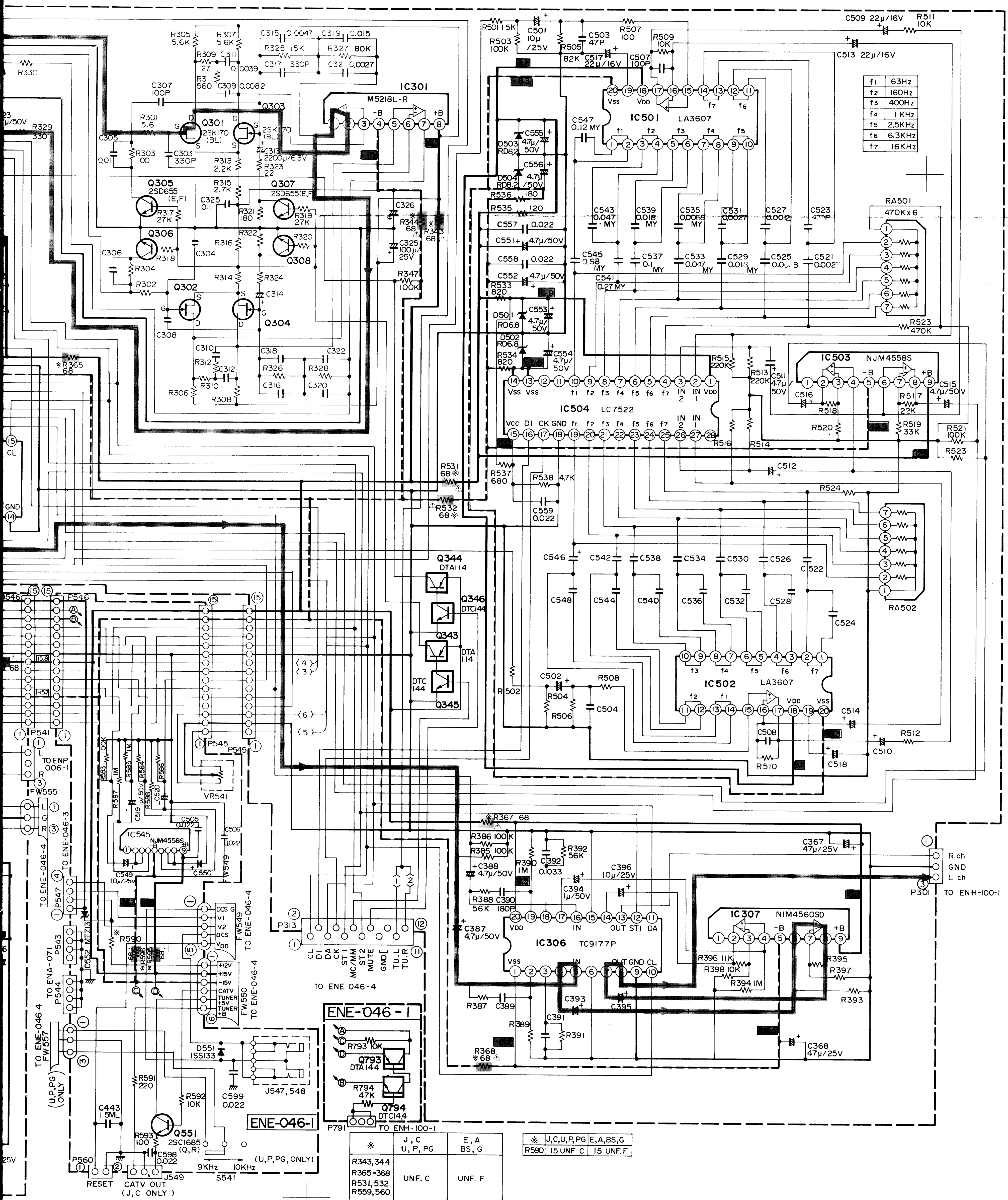
DC VOLTAGE

▨ ----FM

(▨) ---AM

(2) Audio/Video Input Section


ENF-042-1
ENE-046-2
ENE-046-3
J301 PHONO
J301 CD
J302 REC
DAT PLAY
J303 REC
TAPE 1 PLAY
J304 REC
TAPE 2 PLAY
Lch
Rch
L337 390μH
※ C327,328 G ONLY
※ C335 ~ C348 G ONLY
※ C561 ~ C572 G ONLY
Q342
Q341
2SK163(L2,M1)
IC302 TC9164N
IC303 NJM4560SD
IC305 NJM4558S
IC304 TC9164N
P312
TO ENP-006-1 D.AP
FW542
P542
Q301 2SK170 (BL)
Q305 2SD655 (E,F)
Q306
Q302
Q304
Q307
Q303
VCR 1 J541 REC PLAY
VCR 2 J542 REC PLAY
VIDEO
J543 REAR PRE.OUT
IC541 TC9163N
Q791 Q792 Q561 Q562
Q791,792,561,562 2SK301(P,Q)
D561~564 1SS133
IC542 TC9176P
IC543 NJM4558S
IC544 LA7951
Q541 2SC1685 (R,S)
Q542 2SC1685 (R,S)
Q543 2SC1685 (R,S)
VCR1 J544 REC PLAY
VCR2 J545 REC PLAY
VIDEO J546
MONITOR OUT (A)
MONITOR OUT (B)
PA547 TO ENE-046-1
P548 TO ENH-100-1
PA546
P546
P541 TO ENP 006-1
FW555
P547 TO ENE-046-4
TO ENE-046-3
P543 TO ENA-071
P544 TO ENE-046-4 FW557
(U,P,PG) ONLY
D552 MTZ13
IC545 NJM4558S
VR541
P545
FW549 TO ENE-046-4
FW550 TO ENE-046-4
P313
D551 1SS133
Q551 2SC1685 (Q,R)
P560 RESET
CATV OUT J549 (J,C ONLY)
9KHz 10KHz S541
(U,P,PG,O
J547,5
ENE-04

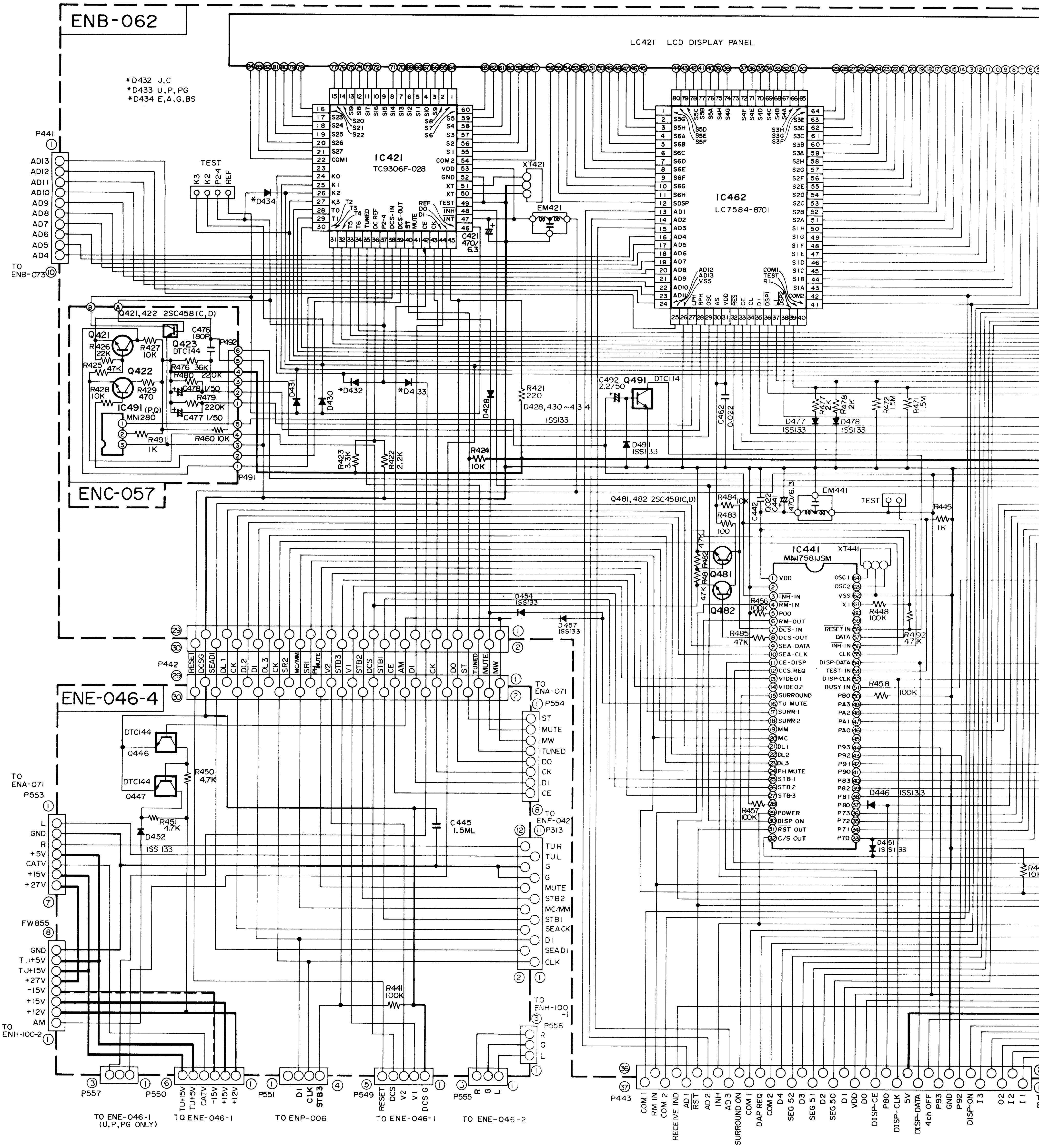

IC301 M5218L-R
Q301 2SK170 (BL)
Q303 2SK170 (BL)
Q305 2SD655 (E,F)
Q307 2SD655(E,F)
Q306
Q308
Q302
Q304
R305 5.6K
R307 5.6K
R309 27
R311 560
C311 0.0039
C309 0.0082
C315 0.0047
C319 0.015
R325 15K
R327 180K
C317 330P
C321 0.0027
C307 100P
R301 5.6
R303 100
C303 330P
R313 2.2K
C313 2200μ/6.3V
R323 22
R315 2.7K
C325 0.1
R321 180
R317 27K
R319 27K
R322
R320
R316
C304
C306
R304
R302
R318
R314
R324
C314
C308
C310
R312
C312
R310
R306
R308
C318
C322
R326
R328
C316
C320
R329 330
R330
C305 0.01
C326
R344 68
R343 68
C325 100μ 25V
R347 100K
※R365 68
IC501 LA3607
IC502 LA3607
IC503 NJM4558S
IC504 LC7522
IC306 TC9177P
IC307 NJM4560SD
IC545 NJM4558S
R501 1.5K
C501 10μ /25V
R503 100K
R505 82K
C503 47P
C517 22μ/16V
R507 100
C507 100P
R509 10K
C509 22μ/16V
R511 10K
C513 22μ/16V
C547 0.12 MY
D503 RD8.2
D504 RD8.2
C555 4.7μ/50V
C556 4.7μ/50V
R536 180
R535 120
C557 0.022
C551 4.7μ/50V
C558 0.022
C552 4.7μ/50V
R533 820
D501 RD6.8
D502 RD6.8
C553 4.7μ/50V
C554 4.7μ/50V
R534 820
C543 0.047 MY
C539 0.018 MY
C535 0.0068 MY
C531 0.0027
C527 0.0012
C523 47P
C545 0.68 MY
C537 0.1 MY
C533 0.047 MY
C529 0.018 MY
C525 0.0068
C521 0.0027
C541 0.27 MY
RA501 470K x 6
R523 470K
RA502
R515 220K
R513 220K
C511 4.7μ/50V
C516
R518
R517 22K
R519 33K
R520
C515 4.7μ/50V
R521 100K
R523
R516
R514
C512
R524
R531 68 ※
R532 68 ※
R537 680
R538 4.7K
C559 0.022
C546 C542 C538 C534 C530 C526 C522
C548 C544 C540 C536 C532 C528 C524
Q344 DTA114
Q346 DTC144
Q343 DTA114
Q345 DTC144
C502
R504
R506
R508
C504
R502
C514
C508
R510
C510
R512
C518
※R367 68
R386 100K
R385 100K
R392 56K
R390 1M
C392 0.033
C388 4.7μ/50V
R388 56K
C390 180P
C394 1μ/50V
C396 10μ/25V
C387 4.7μ/50V
C367 47μ/25V
C368 47μ/25V
R387 C389
C391
R389
R391
C393
C395
R368 ※68
R396 11K
R398 10K
R394 1M
R395
R397
R393
P301 TO ENH-100-1
R ch GND L ch
Vss f1 f2 f3 f4 f5 f6 f7 VDD IN 1 IN 2
VCC DI CK GND
CL DI DA CK ST1 MC/MM ST2 MUTE GND TU.L TU.R
P313
TO ENE 046-4
VDD IN OUT STI DA
Vss OUT GND CL
-B +B
P546 P541 P545 P543 P544 P547 P560
TO ENP 006-1
FW555
TO ENE-046-3
TO ENE-046-4
TO ENA-071
TO ENE-046-4 FW557
(U,P,PG ONLY)
VR541
R583 R587 R585 R584 R586 R588 R589
C519 1μ/50V
C520
C505 0.022
C506 0.022
C549 10μ/25V
C550
W549
R590
D552 MTZ13
R595 R596
DCS G V1 V2 DCS VDD
+12V +15V -15V CATV TUNER +5V TUNER +B
FW549 TO ENE-046-4
FW550 TO ENE-046-4
D551 1SS133
C599 0.022
J547, 548
R591 220
R592 10K
Q551 2SC1685 (Q,R)
R593 100
C598 0.022
C443 1.5ML
RESET
CATV OUT (J,C ONLY)
J549
9KHz 10KHz
S541
(U,P,PG, ONLY)
ENE-046-1
R793 10K
Q793 DTA144
R794 47K
Q794 DTC144
P791 TO ENH-100-1
CL GND

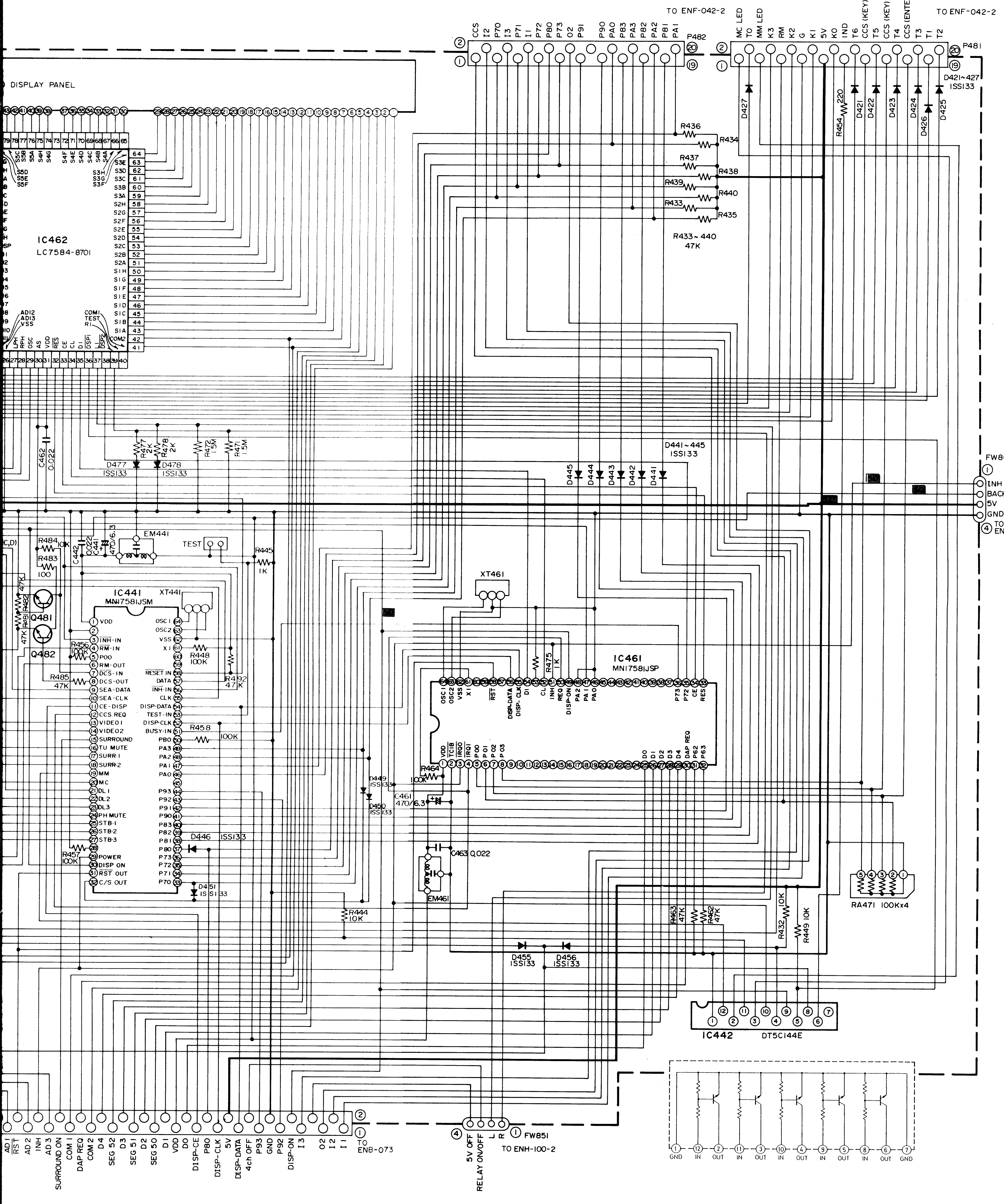
f1	63Hz
f2	160Hz
f3	400Hz
f4	1 KHz
f5	2.5KHz
f6	6.3KHz
f7	16KHz

※	J, C U, P, PG	E, A BS, G
R343, 344 R365~368 R531, 532 R559, 560 R595, 596	UNF. C	UNF. F

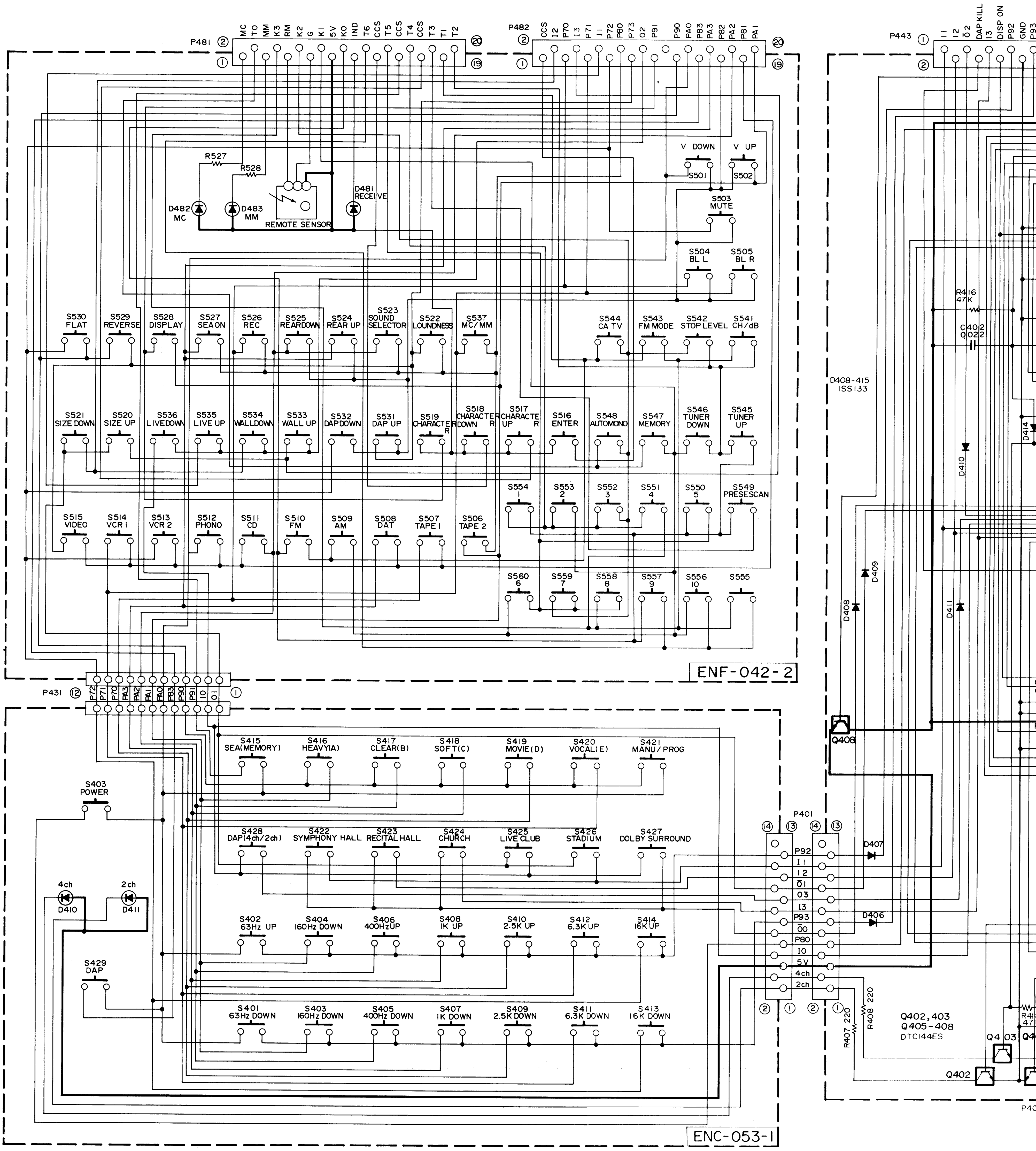
※	J,C,U,P,PG	E,A,BS,G
R590	15 UNF C	15 UNF. F

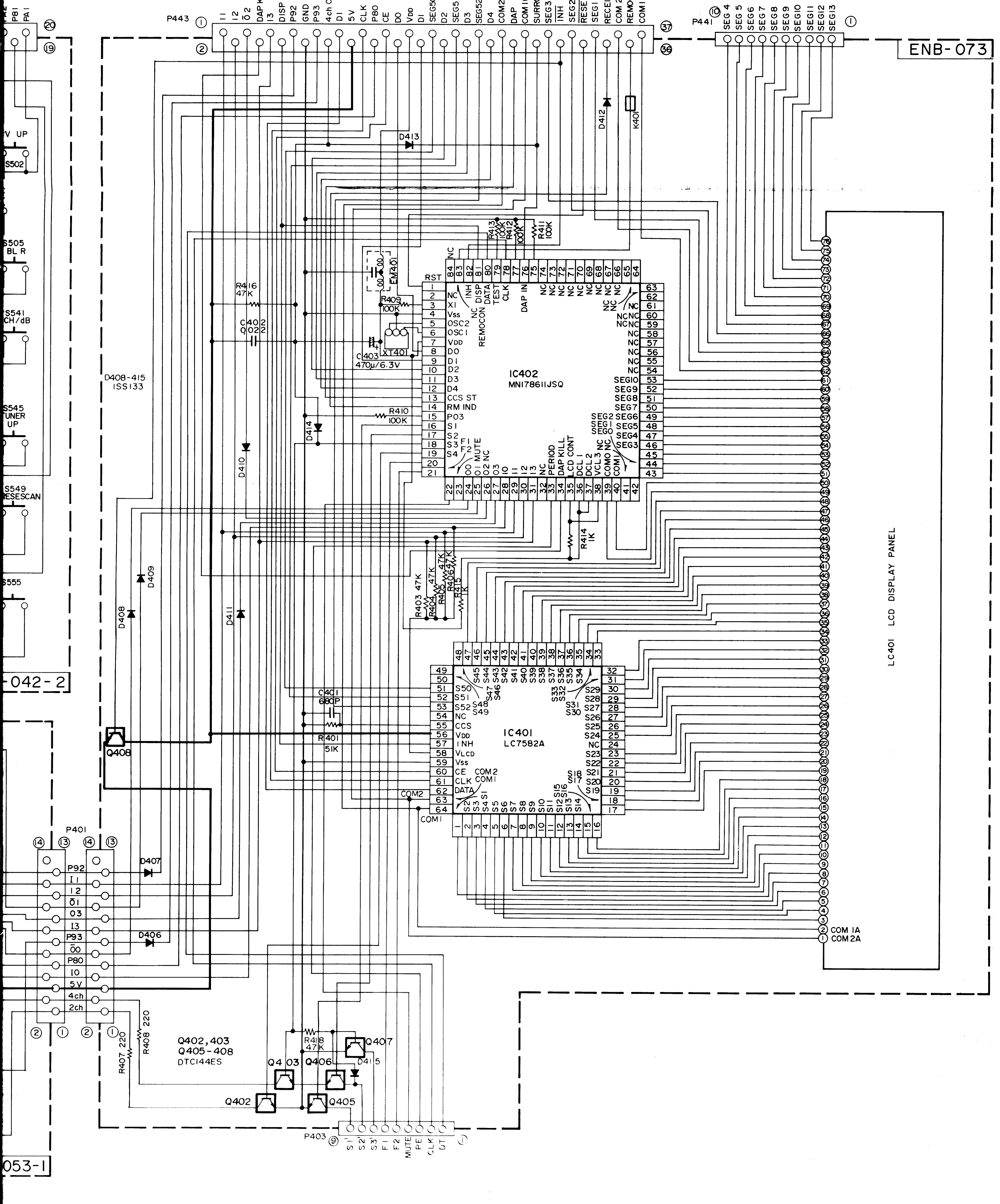
(3) Logic Section


ENB-062
LC421 LCD DISPLAY PANEL
*D432 J,C
*D433 U,P,PG
*D434 E,A,G,BS
P441
AD13
AD12
AD11
AD10
AD9
AD8
AD7
AD6
AD5
AD4
TO ENB-073
TEST
K3
K2
P2-4
REF
*D434
IC421
TC9306F-028
XT421
EM421
C421 470/6.3
IC462
LC7584-8701
Q421,422 2SC458(C,D)
Q421
R426 22K
R425 47K
R427 10K
Q423 DTC144
C476 180P
P492
Q422
R428 10K
R429 470
R476 36K
R480 220K
C478 1/50
R479 220K
C477 1/50
IC491 (P,Q) MN1280
R491 1K
R460 10K
P491
ENC-057
D431
D430
*D432
*D433
D428
R421 220
D428,430~434 ISS133
R423 3.3K
R422 2.2K
R424 10K
C492 2.2/50
Q491 DTC114
D491 ISS133
C462 0.022
R477 2K
R478 2K
R472 1.5M
R471 1.5M
D477 ISS133
D478 ISS133
Q481,482 2SC458(C,D)
R484 10K
R483 100
C442 0.022
C441 470/6.3
EM441
TEST
R445 1K
R482 47K
R481 47K
Q481
Q482
IC441
MN17581JSM
XT441
R456 100K
R485 47K
R448 100K
R492 47K
R458 100K
D446 ISS133
R457 100K
D451 ISS133
D454 ISS133
D457 ISS133
P442
RESET
DCSG
SEADI
DL1
CK
DL2
DI
DL3
CK
SR2
MC/MM
SR1
PH MUTE
V2
STB3
V1
STB2
DCS
STB1
CE
AM
DI
CK
DO
ST
TUNED
MUTE
MW
TO ENA-071
ENE-046-4
DTC144
Q446
DTC144
Q447
R450 4.7K
R451 4.7K
D452 ISS 133
C445 1.5ML
P554
ST
MUTE
MW
TUNED
DO
CK
DI
CE
TO ENF-042
P313
TUR
TUL
G
G
MUTE
STB2
MC/MM
STB1
SEACK
DI
SEADI
CLK
TO ENA-071
P553
L
GND
R
+5V
CATV
+15V
+27V
FW855
GND
TU+5V
TU+15V
+27V
-15V
+15V
+12V
AM
TO ENH-100-2
R441 100K
TO ENH-100-1
P556
R
G
L
P557
TO ENE-046-1 (U,P,PG ONLY)
P550
TU+15V
TU+5V
CATV
-15V
+15V
+12V
TO ENE-046-1
P551
DI
CLK
STB3
TO ENP-006
P549
RESET
DCS
V2
V1
DCS G
TO ENE-046-1
P555
R
G
L
TO ENE-046-2
P443
COM1
RM IN
COM 2
RECEIVE IND
AD1
RST
AD2
INH
AD3
SURROUND ON
COM1
DAP REQ
COM2
D4
SEG 52
D3
SEG 51
D2
SEG 50
D1
VDD
DO
DISP-CE
P80
DISP-CLK
5V
DISP-DATA
4ch OFF
P93
GND
P92
DISP-ON
I3
O2
I2
I1

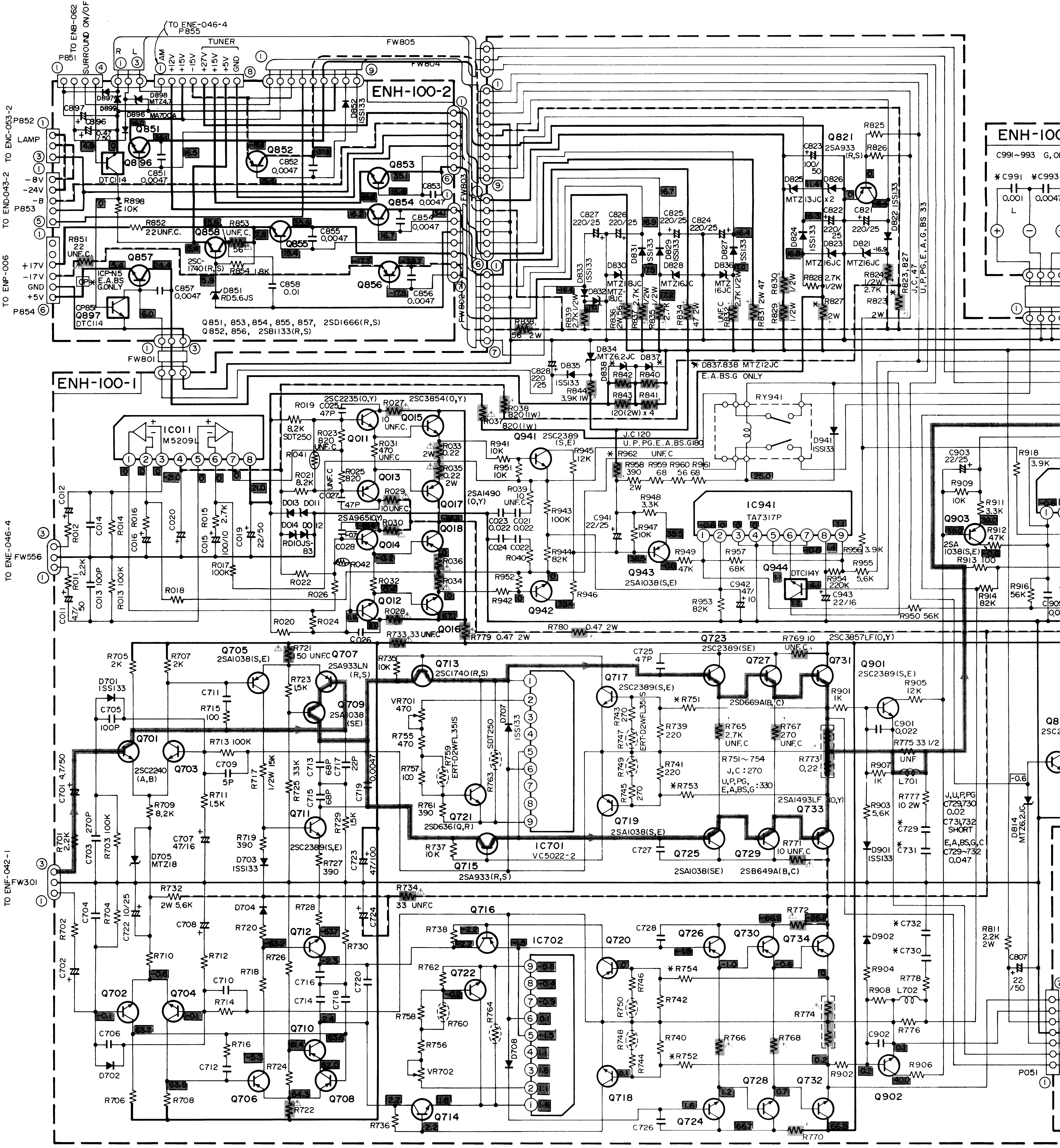

TO ENF-042-2
CCS
I2
P70
I3
P71
I1
P72
P80
P73
O2
P91
P90
PA0
P83
PA3
P82
PA2
P81
PA1
P482
TO ENF-042-2
MC LED
TO
MM LED
K3
RM
K2
G
K1
5V
K0
IND
T6
CCS (KEY)
T5
CCS (KEY)
T4
CCS (ENTER)
T3
T1
T2
P481
D421~427
ISS133
D427
R454 220
D421
D422
D423
D424
D426
D425
DISPLAY PANEL
R436
R434
R437
R438
R439
R440
R433
R435
R433~440
47K
IC462
LC7584-8701
COM1
TEST
R1
ADI2
ADI3
VSS
C462
0.022
R477 2K
R478 2K
R472 1.5M
R471 1.5M
D477
ISS133
D478
ISS133
D441~445
ISS133
D445
D444
D443
D442
D441
FW862
INH
BACK UP 5V
5V
GND
TO END-043-1
R484 10K
R483 100
C442 0.022
C441 470/6.3
EM441
TEST
R445 1K
47K
R482
R481 47K
Q481
Q482
IC441
MN1758IJSM
XT441
VDD
INH-IN
RM-IN
P00
RM-OUT
DCS-IN
DCS-OUT
SEA-DATA
SEA-CLK
CE-DISP
CCS.REQ
VIDEO1
VIDEO2
SURROUND
TU MUTE
SURR-1
SURR-2
MM
MC
DL1
DL2
DL3
PH MUTE
STB-1
STB-2
STB-3
POWER
DISP ON
RST OUT
C/S OUT
OSC1
OSC2
VSS
X1
RESET IN
DATA
INH-IN
CLK
DISP-DATA
TEST-IN
DISP-CLK
BUSY-IN
P80
PA3
PA2
PA1
PA0
P93
P92
P91
P90
P83
P82
P81
P80
P73
P72
P71
P70
R448 100K
R492 47K
R458 100K
R456 100K
R485 47K
R457 100K
D446 ISS133
D451 ISS133
XT461
R475 1K
IC461
MN1758IJSP
OSC1
OSC2
VSS
X1
RST
DISP-DATA
DISP-CLK
DI
CL
INH
REQ
DISP-ON
PA2
PA1
PA0
P73
P72
CE
RES
VDD
TCIB
IRQ0
IRQ1
P00
P01
P02
P03
D0
D1
D2
D3
D4
DAP REQ
P62
P63
R464 100K
D449 ISS133
D450 ISS133
C461 470/6.3
C463 0.022
EM461
R444 10K
D455 ISS133
D456 ISS133
R463 47K
R462 47K
R432 10K
R449 10K
RA471 100Kx4
IC442
DT5C144E
GND
IN
OUT
AD1
RST
AD2
INH
AD3
SURROUND ON
COM1
DAP REQ
COM2
D4
SEG 52
D3
SEG 51
D2
SEG 50
D1
VDD
D0
DISP-CE
P80
DISP-CLK
5V
DISP-DATA
4ch OFF
P93
GND
P92
DISP-ON
I3
O2
I2
I1
TO ENB-073
5V OFF
RELAY ON/OFF
L
R
FW851
TO ENH-100-2

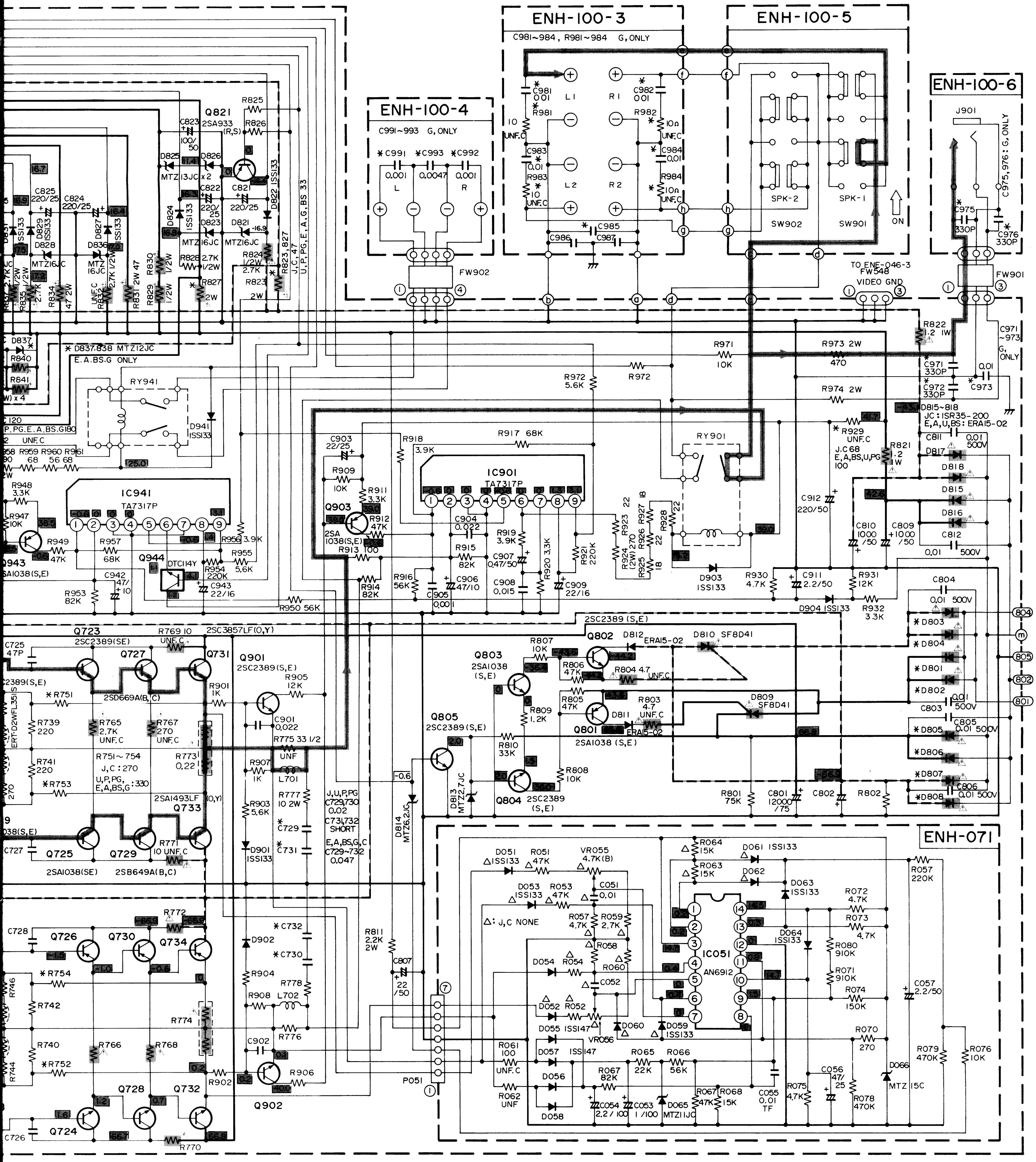
(4) LCD & Control Switch Section


P481
MC
TO
MM
K3
RM
K2
G
K1
5V
K0
IND
T6
CCS
T5
CCS
T4
CCS
T3
T1
T2
P482
CCS
I2
P70
I3
P71
I1
P72
P80
P73
O2
P91
P90
PA0
P83
PA3
P82
PA2
P81
PA1
P443
I1
I2
O2
DAP KILL
I3
DISP ON
P92
GND
P93
R527
R528
D482
MC
D483
MM
D481
RECEIVE
REMOTE SENSOR
V DOWN
V UP
S501
S502
S503
MUTE
S504
BL L
S505
BL R
S530
FLAT
S529
REVERSE
S528
DISPLAY
S527
SEA ON
S526
REC
S525
REAR DOWN
S524
REAR UP
S523
SOUND SELECTOR
S522
LOUDNESS
S537
MC/MM
S544
CA TV
S543
FM MODE
S542
STOP LEVEL
S541
CH/dB
S521
SIZE DOWN
S520
SIZE UP
S536
LIVE DOWN
S535
LIVE UP
S534
WALL DOWN
S533
WALL UP
S532
DAP DOWN
S531
DAP UP
S519
CHARACTER R
S518
CHARACTER DOWN R
S517
CHARACTER UP R
S516
ENTER
S548
AUTO MONO
S547
MEMORY
S546
TUNER DOWN
S545
TUNER UP
S554
1
S553
2
S552
3
S551
4
S550
5
S549
PRESESCAN
S515
VIDEO
S514
VCR 1
S513
VCR 2
S512
PHONO
S511
CD
S510
FM
S509
AM
S508
DAT
S507
TAPE 1
S506
TAPE 2
S560
6
S559
7
S558
8
S557
9
S556
10
S555
ENF-042-2
P431
P72
P71
P70
PA3
PA2
PA1
PA0
P83
P90
P91
I0
O1
S415
SEA(MEMORY)
S416
HEAVY(A)
S417
CLEAR(B)
S418
SOFT(C)
S419
MOVIE(D)
S420
VOCAL(E)
S421
MANU/PROG
S403
POWER
S428
DAP(4ch/2ch)
S422
SYMPHONY HALL
S423
RECITAL HALL
S424
CHURCH
S425
LIVE CLUB
S426
STADIUM
S427
DOLBY SURROUND
4ch
2ch
D410
D411
S402
63Hz UP
S404
160Hz DOWN
S406
400Hz UP
S408
1K UP
S410
2.5K UP
S412
6.3K UP
S414
16K UP
S429
DAP
S401
63Hz DOWN
S403
160Hz DOWN
S405
400Hz DOWN
S407
1K DOWN
S409
2.5K DOWN
S411
6.3K DOWN
S413
16K DOWN
ENC-053-1
P401
P92
I1
I2
O1
O3
I3
P93
O0
P80
I0
5V
4ch
2ch
D407
D406
R407 220
R408 220
Q402,403
Q405-408
DTC144ES
Q402
Q403
Q408
D408-415
1SS133
D408
D409
D410
D411
D414
R416
47K
C402
0.022
R41
47

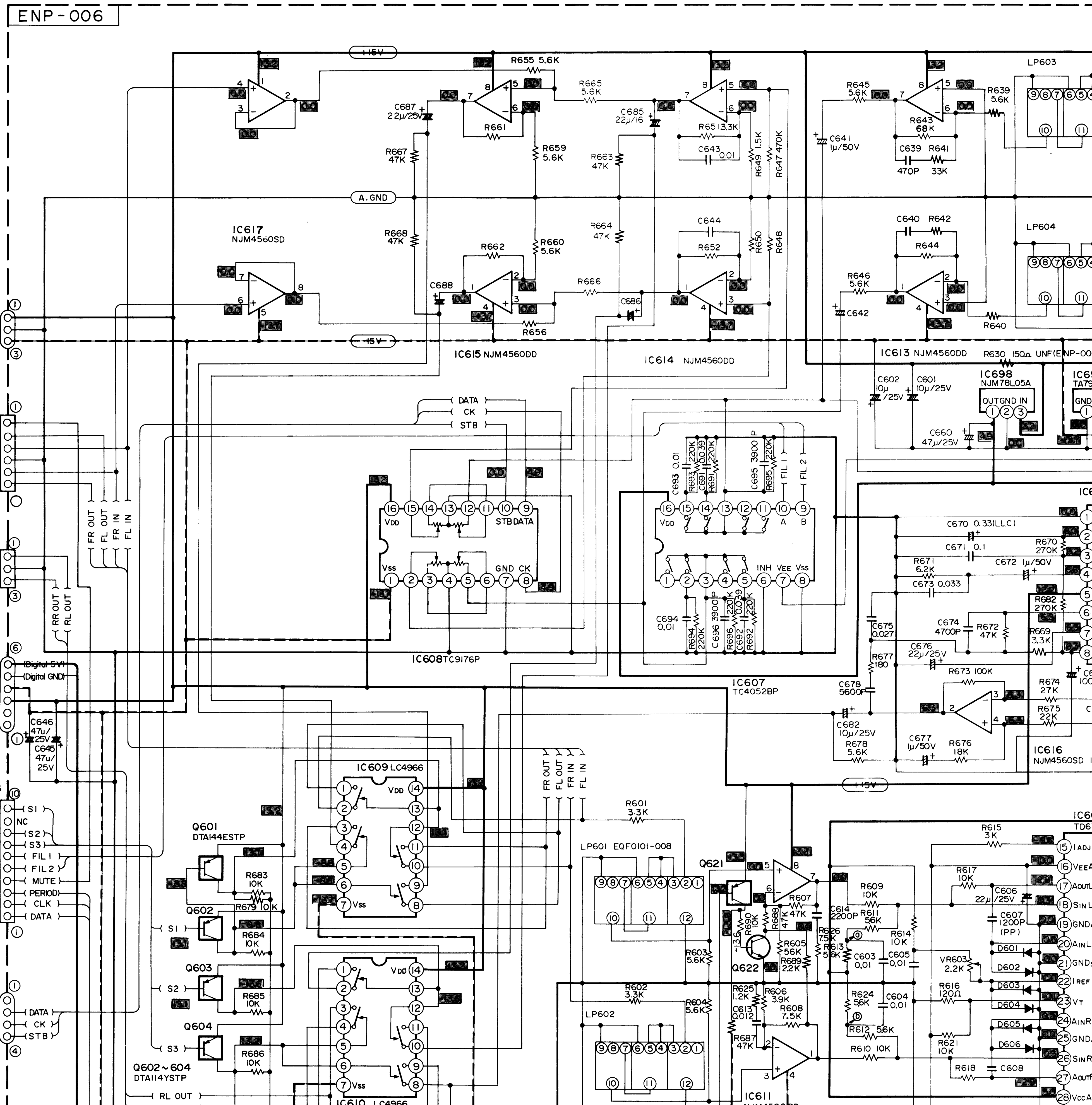

ENB-073
P443
I1
I2
Ō2
DAP KILL
I3
DISP ON
P92
GND
P93
4ch OFF
DI
5V
CLK
P80
CE
DO
VDD
DI
SEG50(LC7582)
D2
SEG51(LC7582)
D3
SEG52(LC7582)
D4
COM2(LC7582)
DAP
COM1(LC7582)
SURROUND ON
SEG3
INH
SEG2
RESET
SEG1
RECEIVED IND
COM 2
REMOCON IN
COM1
P441
SEG 4
SEG 5
SEG6
SEG7
SEG8
SEG9
SEG10
SEG11
SEG12
SEG13
D413
D412
K401
R413 100K
R412 100K
R411 100K
EM401
R416 47K
R409 100K
C402 0.022
XT401
C403 470μ/6.3V
IC402
MN178611JSQ
R410 100K
D414
D410
D408-415
1SS133
R414 1K
R403 47K
R404
R405 47K
R406
R415 1K
D409
D408
D411
C401 680P
R401 51K
IC401
LC7582A
COM2
COM1
Q408
P401
P92
I1
I2
Ō1
O3
I3
P93
Ō0
P80
IO
5V
4ch
2ch
D407
D406
R407 220
R408 220
Q402,403
Q405-408
DTC144ES
R418 47K
Q403
Q406
Q407
D415
Q402
Q405
P403
S1
S2
S3
F1
F2
MUTE
PE
CLK
DT
LC401 LCD DISPLAY PANEL
COM 1A
COM 2A
V UP
S502
S505
BL R
S541
CH/dB
S545
TUNER UP
S549
PRESESCAN
S555
042-2
053-1
P81
PA1

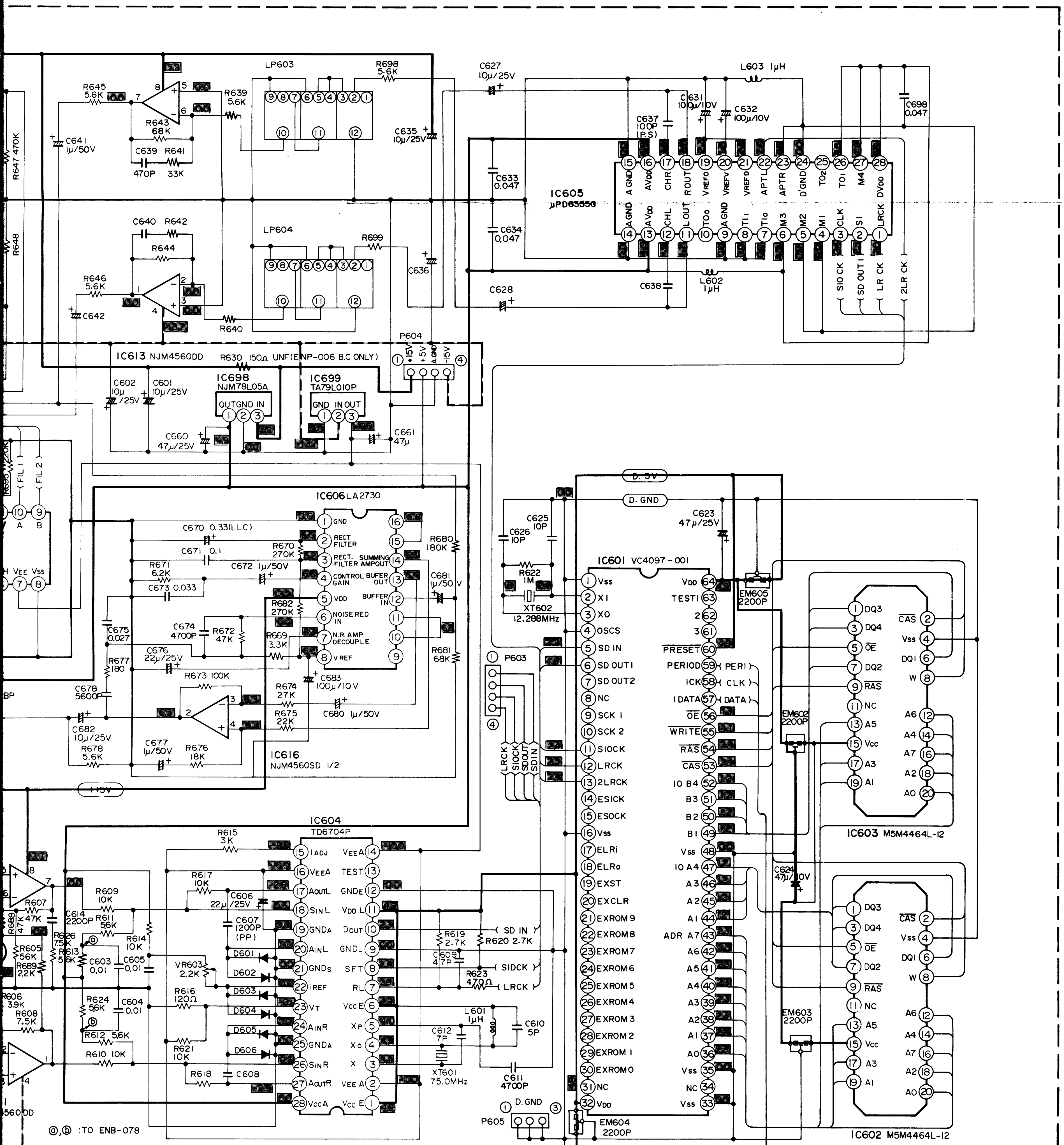
(5) Main Amplifier Section


ENH-100-2
ENH-100-1
ENH-100
TO ENB-062 SURROUND ON/OFF
TO ENE-046-4 P855
TUNER
P851
P852
P853
P854
TO ENC-053-2
TO END-043-2
TO ENP-006
LAMP
-8V
-24V
-B
+17V
-17V
GND
+5V
FW805
FW804
FW803
FW802
FW801
Q851
Q852
Q853
Q854
Q855
Q856
Q857
Q858
Q896
Q897
DTC114
Q851, 853, 854, 855, 857, 2SD1666(R,S)
Q852, 856, 2SB1133(R,S)
IC011
M5209L
TO ENE-046-4
FW556
Q011
Q012
Q013
Q014
Q015
Q016
Q017
Q018
2SC2235(O,Y)
2SC3854(O,Y)
2SA965(O,Y)
2SA1490 (O,Y)
Q941
Q942
Q943
Q944
2SC2389 (S,E)
2SA1038(S,E)
DTC114Y
IC941
TA7317P
RY941
D941 ISS133
Q821
2SA933 (R,S)
D837,838 MTZ12JC
E.A.BS.G ONLY
Q901
Q902
Q903
2SC2389(S,E)
2SA 1038(S,E)
TO ENF-042-1
FW301
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
Q711
Q712
Q713
Q714
Q715
Q716
Q717
Q718
Q719
Q720
Q721
Q722
Q723
Q724
Q725
Q726
Q727
Q728
Q729
Q730
Q731
Q732
Q733
Q734
2SC2240 (A,B)
2SA1038(S,E)
2SA933LN (R,S)
2SC1740(R,S)
2SD636(Q,R)
2SA933(R,S)
2SC2389(SE)
2SD669A(B,C)
2SA1038(SE)
2SB649A(B,C)
2SA1493LF (O,Y)
2SC3857LF(O,Y)
IC701
VC5022-2
IC702
VR701 470
VR702
L701
L702
P051
R751~754
J,C : 270
U,P,PG, E,A,BS,G : 330
J,U,P,PG C729,730 0.02
C731,732 SHORT
E,A,BS,G,C C729~732 0.047


ENH-100-3
C981~984, R981~984 G, ONLY
ENH-100-5
ENH-100-4
C991~993 G, ONLY
ENH-100-6
J901
C975, 976 : G, ONLY
SPK-2
SPK-1
SW902
SW901
ON
FW902
FW901
TO ENE-046-3 FW548
VIDEO GND
Q821
2SA933 (R,S)
R825
R826
C823 100/50
D825
D826
MTZ13JC x2
C821 220/25
C822 220/25
D822 ISS133
D821 MTZ16JC
D823
D824 ISS133
C825 220/25
C824 220/25
D827
D828
D829 ISS133
D836 MTZ16JC
R828 2.7K 1/2W
R824 1/2W 2.7K
R823, 827 J, C, 47 U, P, PG, E, A, G, BS 33
R827 2W
R830 1/2W
R829 1/2W
R831 2W 47
R834 47 2W
D837
R840
R841
✱ D837,838 MTZ12JC E, A, BS, G ONLY
RY941
D941 ISS133
IC941 TA7317P
R948 3.3K
R947 10K
R949 47K
R957 68K
R956 3.9K
R955 5.6K
R954 220K
C943 22/16
Q943 2SA1038(S, E)
Q944 DTC114Y
C942 47/10
R953 82K
R950 56K
R959 R960 R961 68 56 68
C903 22/25
R918 3.9K
R917 68K
R909 10K
R911 3.3K
R912 47K
Q903 2SA1038(S, E)
R913 100
R914 82K
IC901 TA7317P
C904 0.022
R919 3.9K
R915 82K
R916 56K
C905 0.01
C906 47/10
C907 0.47/50
C908 0.015
R920 3.3K
C909 22/16
R921 220K
R923 22
R924 (2W) 270
R926 22
R925 18
R927 18
R928 22
RY901
D903 ISS133
R971 10K
R972 5.6K
R972
R973 2W 470
R974 2W
R822 1.2 1W
C971~973 G, ONLY
C971 330P
C972 330P
C973 0.01
D815~818 JC : ISR35-200 E, A, U, BS : ERA15-02
R929 UNF.C
J.C 68 E, A, BS, U, PG 100
R821 1.2 1W
C811 0.01 500V
D817
D818
D815
D816
C812 0.01 500V
C912 220/50
C810 1000/50
C809 10.00/50
R930 4.7K
C911 2.2/50
R931 12K
D904 ISS133
R932 3.3K
C804 0.01 500V
D803
D804
D801
D802
C803 0.01 500V
C805 0.01 500V
D805
D806
D807
D808
C806 0.01 500V
804
m
805
802
801
Q723 2SC2389(SE)
Q727
Q731
R769 10 UNF.C
2SC3857LF(O, Y)
C725 47P
2SD669A(B, C)
R751
R739 220
R765 2.7K UNF.C
R767 270 UNF.C
R901 1K
R741 220
R751~754 J, C : 270 U, P, PG, E, A, BS, G : 330
R753
R773 0.22
2SA1493LF (O, Y)
Q733
Q725
Q729
2SA1038(SE)
2SB649A(B, C)
R771 10 UNF.C
C727
Q901 2SC2389(S, E)
R905 12K
C901 0.022
R775 33 1/2 UNF
R907 1K
L701
R777 10 2W
R903 5.6K
C729
C731
D901 ISS133
J, U, P, PG C729, 730 0.02 C731, 732 SHORT E, A, BS, G, C C729~732 0.047
Q802
D812 ERA15-02
D810 SF8D41
R807 10K
Q803 2SA1038 (S, E)
R806 47K
R804 4.7 UNF.C
R805 47K
R803 4.7 UNF.C
D809 SF8D41
R809 1.2K
D811 ERA15-02
Q801 2SA1038 (S, E)
Q805 2SC2389(S, E)
R810 33K
Q804 2SC2389 (S, E)
R808 10K
D813 MTZ2.7JC
D814 MTZ6.2JC
R801 75K
C801 12000/75
C802
R802
ENH-071
D051 ISS133
R051 47K
VR055 4.7K(B)
C051 0.01
D053 ISS133
R053 47K
△ : J, C NONE
R057 4.7K
R059 2.7K
R058
R060
D054
R054
C052
D052
R052
D055 ISS147
VR056
D060
D059 ISS133
D057 ISS147
D056
D058
R061 100 UNF.C
R062 UNF
R065 22K
R066 56K
R067 82K
C054 2.2/100
C053 1/100
D065 MTZ11JC
R067 47K
R068 15K
C055 0.01 TF
R064 15K
R063 15K
D061 ISS133
D062
D063 ISS133
D064 ISS133
IC051 AN6912
R072 4.7K
R073 4.7K
R080 910K
R071 910K
R074 150K
R070 270
R057 220K
C057 2.2/50
R079 470K
R076 10K
C056 47/25
R075 4.7K
R078 470K
D066 MTZ15C
P051
Q726
Q730
Q734
C728
R772
R754
R742
R746
R774
R740
R766
R768
R752
R744
Q728
Q732
Q724
C726
R770
R902
C732
C730
D902
R904
R778
R908
L702
R776
C902
R906
Q902
R811 2.2K 2W
C807 22/50

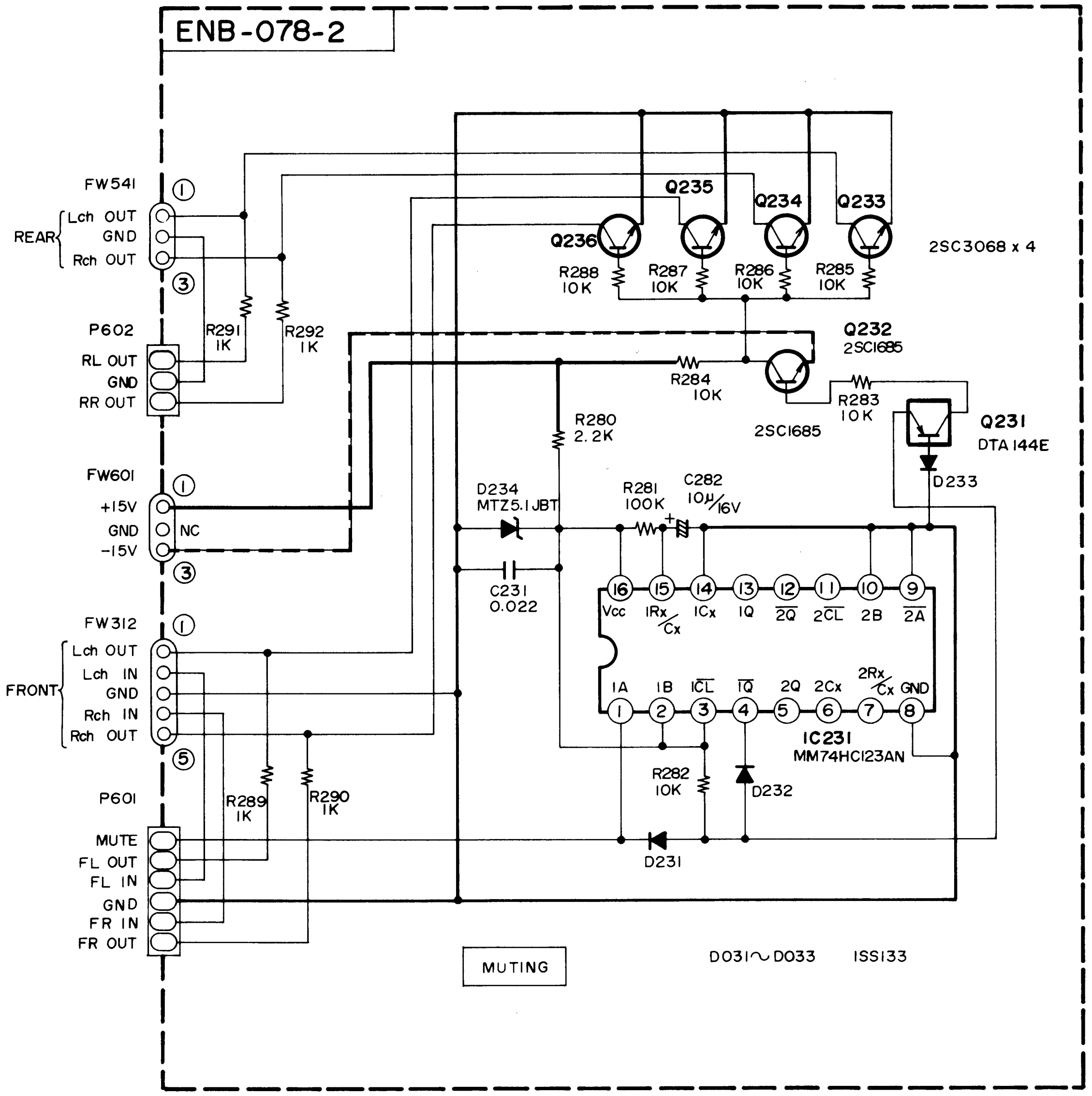
(6) Digital Acoustic Processor Section

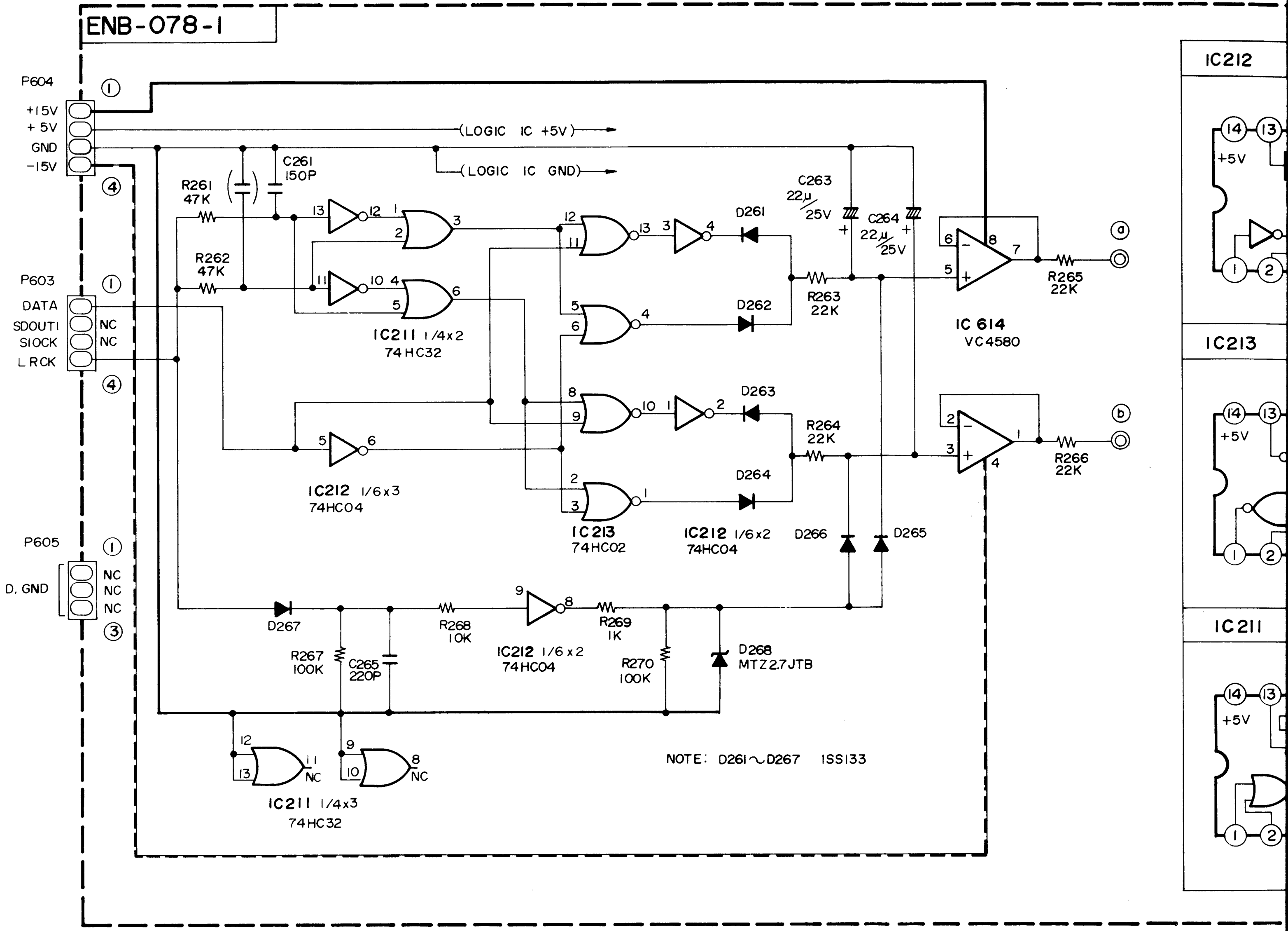

ENP-006
+15V
A.GND
-15V
IC617 NJM4560SD
IC615 NJM4560DD
IC614 NJM4560DD
IC613 NJM4560DD
IC698 NJM78L05A
R630 150Ω
LP603
LP604
R655 5.6K
R665 5.6K
C687 22μ/25V
C685 22μ/16
R651 3.3K
C643 0.01
R649 1.5K
R647 470K
R645 5.6K
R643 68K
R639 5.6K
C641 1μ/50V
C639
R641
470P
33K
R667 47K
R659 5.6K
R663 47K
R661
R668 47K
R660 5.6K
R664 47K
R662
C644
R652
R650
R648
C640
R642
R644
R646 5.6K
C642
R640
C688
C686
R666
R656
FW601
+15V
GND
-15V
P601
MUTE
FL OUT
FL IN
GND
FR IN
FR OUT
P602
RL OUT
GND
RR OUT
FW854
Digital 5V
Digial GND
-15V
+15V
NC
NC
C646 47u/25V
C645 47u/25V
BC403
S1
NC
S2
S3
FIL1
FIL2
MUTE
PERIOD
CLK
DATA
FW551
NC
DATA
CK
STB
DATA
CK
STB
IC608 TC9176P
VDD
STB DATA
VSS
GND CK
IC607 TC4052BP
C693 0.01
R693 220K
C691 0.039
R691 220K
C695 3900P
R695 220K
FIL 1
FIL 2
A
B
INH
VEE
VSS
C694 0.01
R694 220K
C696 3900P
R696 220K
C692 0.039
R692 220K
C602 10μ/25V
C601 10μ/25V
C660 47μ/25V
OUT GND IN
C670 0.33(LLC)
C671 0.1
C672 1μ/50V
R670 270K
R671 6.2K
C673 0.033
R682 270K
C675 0.027
C674 4700P
R672 47K
R669 3.3K
R677 180
C676 22μ/25V
R673 100K
C678 5600P
R674 27K
R675 22K
C682 10μ/25V
C677 1μ/50V
R676 18K
R678 5.6K
IC616 NJM4560SD
IC609 LC4966
IC610 LC4966
Q601 DTA144ESTP
Q602
Q603
Q604
Q602~604 DTA114YSTP
R683 10K
R679 10K
R684 10K
R685 10K
R686 10K
RL OUT
RR OUT
FR OUT
FL OUT
FR IN
FL IN
R601 3.3K
LP601 EQF0101-008
LP602
R603 5.6K
R602 3.3K
R604 5.6K
Q621
Q622
R607 47K
R688 47K
R690 10K
R605 56K
R689 2.2K
R606 3.9K
R608 7.5K
R625 1.2K
C613 0.012
R687 47K
IC611 NJM4560DD
C614 2200P
R611 56K
R609 10K
R626 75K
R613 5.6K
C603 0.01
C605 0.01
R614 10K
R624 56K
C604 0.01
R612 5.6K
R610 10K
R615 3K
R617 10K
C606 22μ/25V
C607 1200P (PP)
VR603 2.2K
R616 120Ω
R621 10K
R618
C608
D601
D602
D603
D604
D605
D606
IADJ
VEE
AOUT
SIN
GND
AIN
GND
IREF
VT
AIN
GND
SIN
AOUT
VCC
ⓐ,ⓑ :TO ENB-078
Q621 DTA144ESTP
Q622 2SC3068AA

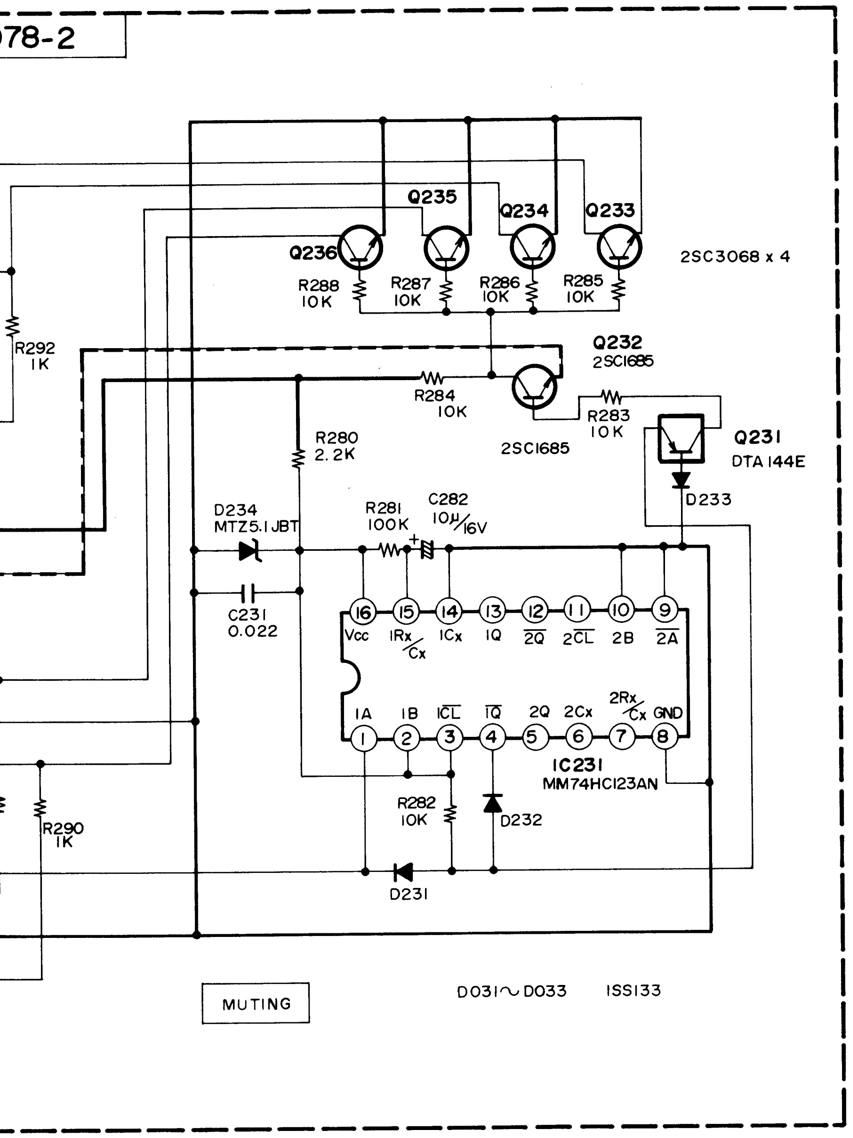


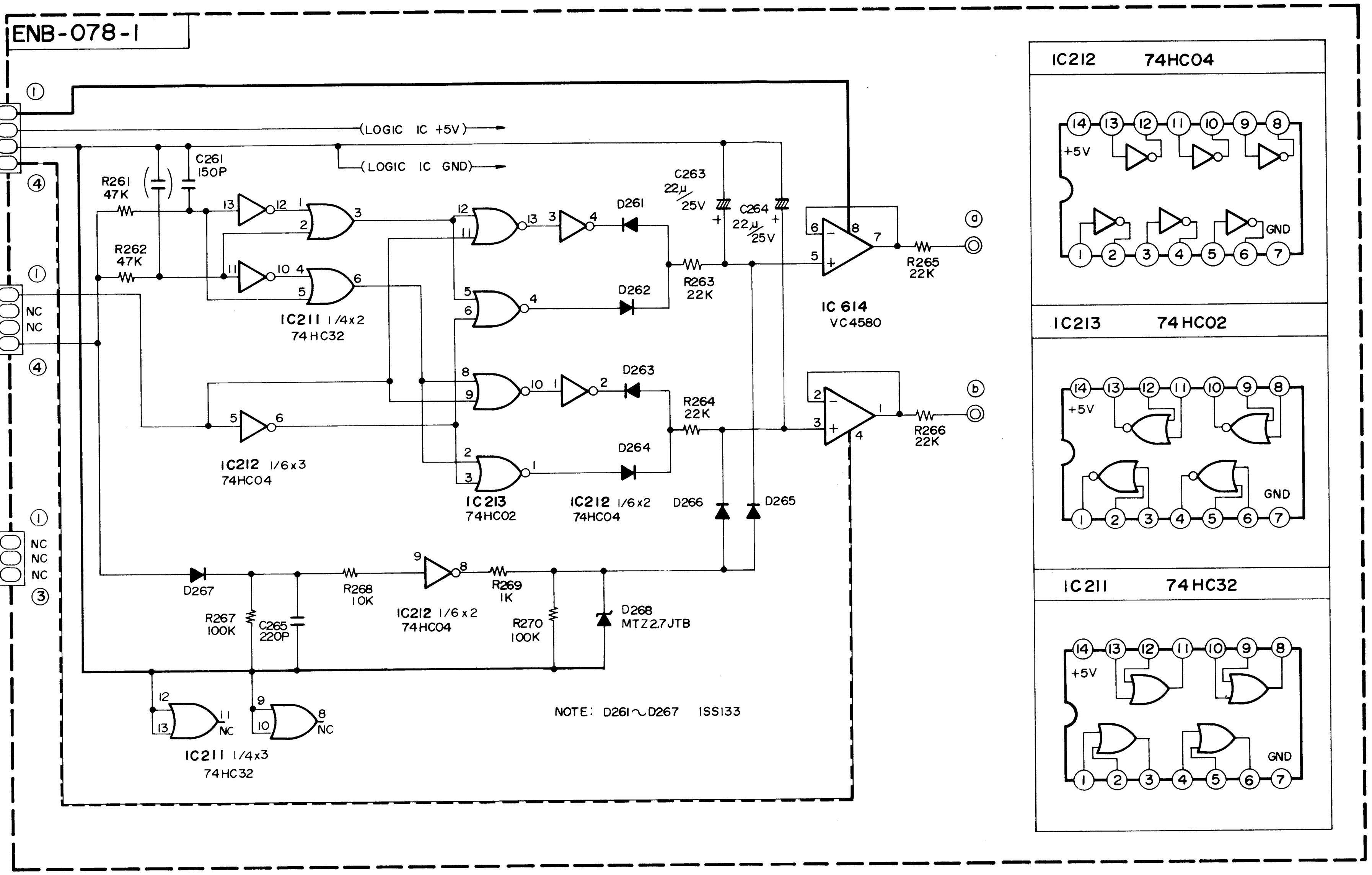
LP603
R698 5.6K
C627 10μ/25V
L603 1μH
R645 5.6K
R639 5.6K
R643 68K
C641 1μ/50V
C639 470P
R641 33K
R647 470K
R648
C631 100μ/10V
C632 100μ/10V
C637 100P (P.S)
C635 10μ/25V
C698 0.047
C633 0.047
C634 0.047
IC605 μPD6355G
AGND AVDD CHR ROUT VREFO AGND VREFD APTL APTR D'GND TO2 TO1 M4 DVDD
AGND AVDD CHL LOUT TOO AGND TI1 TIO M3 M2 M1 CLK SI LRCK
C638
L602 1μH
SIO CK
SD OUT 1
LR CK
2LR CK
C640 R642
R644
LP604
R699
C636
R646 5.6K
C642
R640
C628
P604
+15V +5V A.GND -15V
IC613 NJM4560DD
R630 150Ω UNF(ENP-006 B.C ONLY)
C602 10μ /25V
C601 10μ/25V
IC698 NJM78L05A
OUT GND IN
IC699 TA79L010P
GND IN OUT
C660 47μ/25V
C661 47μ
FIL 1
FIL 2
A B
VEE VSS
IC606 LA2730
C670 0.33(LLC)
C671 0.1
R670 270K
C672 1μ/50V
R671 6.2K
C673 0.033
R680 180K
C681 1μ/50V
R682 270K
C674 4700P
R672 47K
R669 3.3K
C675 0.027
C676 22μ/25V
R677 180
R681 68K
GND
RECT FILTER
RECT. SUMMING FILTER AMPOUT
CONTROL GAIN
BUFFER OUT
VDD
BUFFER IN
NOISE RED IN
N.R. AMP DECOUPLE
V REF
R673 100K
C683 100μ/10V
R674 27K
C678 5600P
R675 22K
C680 1μ/50V
C682 10μ/25V
C677 1μ/50V
R676 18K
R678 5.6K
IC616 NJM4560SD 1/2
+15V
D.5V
D.GND
C625 10P
C626 10P
C623 47μ/25V
R622 1M
XT602 12.288MHz
IC601 VC4097-001
VSS XI XO OSCS SD IN SD OUT1 SD OUT2 NC SCK 1 SCK 2 SIOCK LRCK 2LRCK ESICK ESOCK VSS ELRI ELRO EXST EXCLR EXROM 9 EXROM 8 EXROM 7 EXROM 6 EXROM 5 EXROM 4 EXROM 3 EXROM 2 EXROM 1 EXROM 0 NC VDD
VDD TEST1 2 3 PRESET PERIOD ICK IDATA OE WRITE RAS CAS IO B4 B3 B2 B1 VSS IO A4 A3 A2 A1 ADR A7 A6 A5 A4 A3 A2 A1 A0 VSS NC VSS
PERI CLK DATA
EM605 2200P
EM602 2200P
C624 47μ/10V
EM603 2200P
P603
LRCK SIOCK SDOUT SDIN
IC603 M5M4464L-12
DQ3 DQ4 OE DQ2 RAS NC A5 VCC A3 A1
CAS VSS DQ1 W A6 A4 A7 A2 A0
IC602 M5M4464L-12
IC604 TD6704P
R615 3K
IADJ VEEA AOUTL SINL GNDA AINL GNDS IREF VT AINR GNDA SINR AOUTR VCCA
VEEA TEST GNDE VDD L DOUT GNDL SFT RL VCC E XP XO X VEE A VCC E
R617 10K
C606 22μ/25V
C607 1200P (PP)
R609 10K
R607 47K
C614 2200P
R611 56K
R614 10K
R626 7.5K
R605 56K
R613 5.6K
R689 2.2K
R686 47K
C603 0.01
C605 0.01
VR603 2.2K
D601 D602 D603 D604 D605 D606
R616 120Ω
R606 3.9K
R608 7.5K
R624 56K
C604 0.01
R612 5.6K
R610 10K
R621 10K
R618
C608
R619 2.7K
R620 2.7K
SD IN
C609 47P
R623 470Ω
SIDCK
LRCK
L601 1μH
C610 5P
C612 7P
XT601 75.0MHz
C611 4700P
P605
D.GND
EM604 2200P
EM601 2200P
Digital 5V
Digital GND
ⓐ,ⓑ :TO ENB-078
4560DD
TA144ESTP
SC3068AA

(7) DAP Sub Section

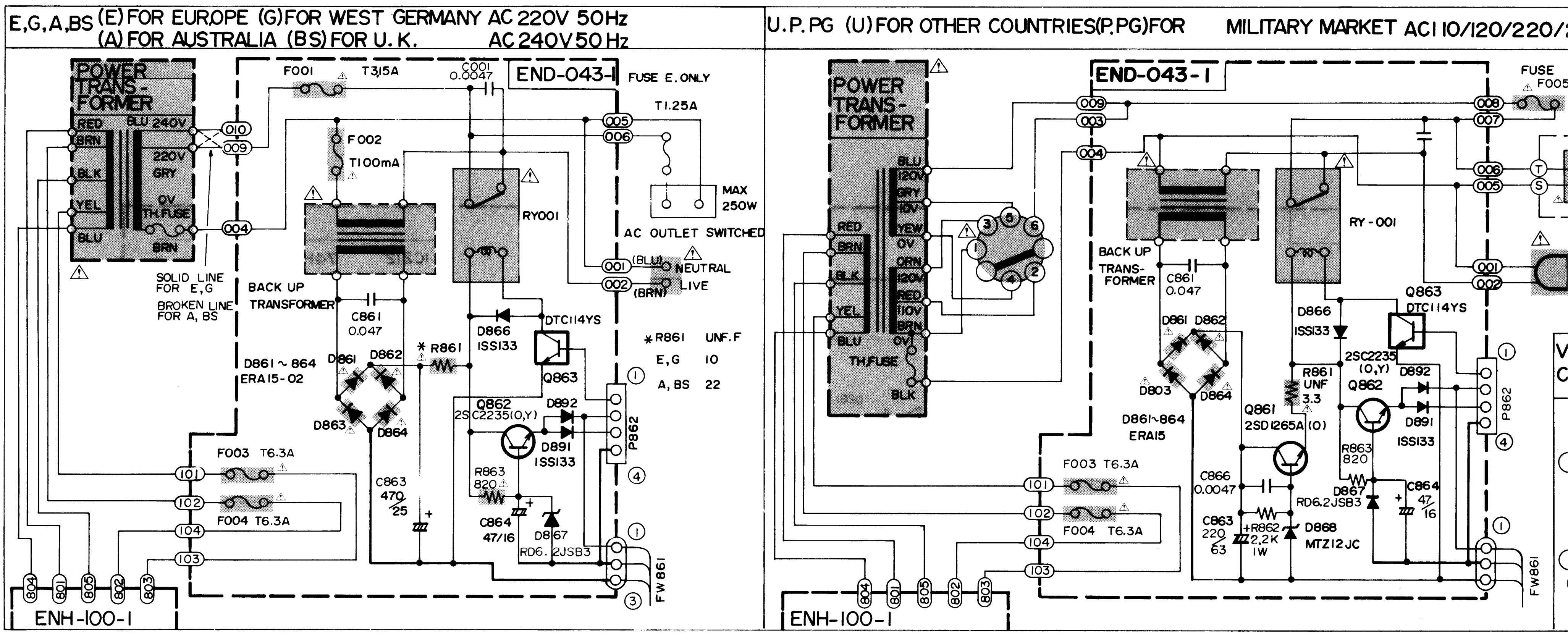

ENB-078-2
FW541
REAR
Lch OUT
GND
Rch OUT
①
③
P602
RL OUT
GND
RR OUT
R291 1K
R292 1K
FW601
+15V
GND
-15V
NC
FW312
FRONT
Lch OUT
Lch IN
GND
Rch IN
Rch OUT
⑤
P601
MUTE
FL OUT
FL IN
GND
FR IN
FR OUT
R289 1K
R290 1K
Q236
Q235
Q234
Q233
2SC3068 x 4
R288 10K
R287 10K
R286 10K
R285 10K
Q232 2SC1685
R284 10K
R283 10K
2SC1685
Q231 DTA144E
D233
R280 2.2K
D234 MTZ5.1JBT
R281 100K
C282 10μ/16V
C231 0.022
Vcc
1Rx/Cx
1Cx
1Q
2Q̄
2CL̄
2B
2Ā
1A
1B
1CL̄
1Q̄
2Q
2Cx
2Rx/Cx
GND
IC231 MM74HC123AN
R282 10K
D232
D231
MUTING
D031～D033 1SS133

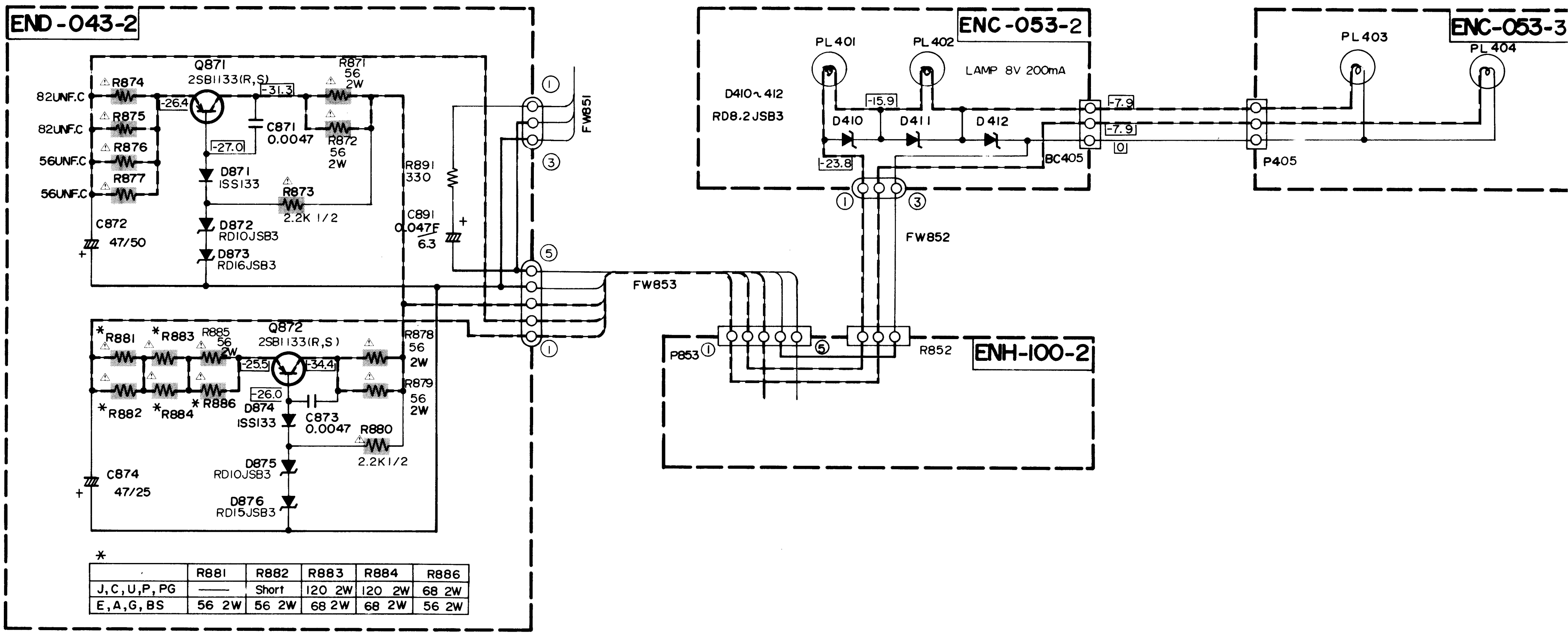

ENB-078-1
P604
+15V
+5V
GND
-15V
①
④
(LOGIC IC +5V)
(LOGIC IC GND)
R261 47K
C261 150P
R262 47K
P603
DATA
SDOUT1
SIOCK
LRCK
NC
NC
IC211 1/4x2 74HC32
IC212 1/6x3 74HC04
IC213 74HC02
IC212 1/6x2 74HC04
D261
D262
D263
D264
D265
D266
C263 22μ 25V
C264 22μ 25V
R263 22K
R264 22K
R265 22K
R266 22K
IC614 VC4580
ⓐ
ⓑ
P605
D. GND
NC
NC
NC
③
D267
R267 100K
C265 220P
R268 10K
IC212 1/6x2 74HC04
R269 1K
R270 100K
D268 MTZ2.7JTB
IC211 1/4x3 74HC32
NOTE: D261～D267 1SS133
IC212
IC213
IC211
+5V


78-2
Q236
Q235
Q234
Q233
2SC3068 x 4
R288 10K
R287 10K
R286 10K
R285 10K
R292 1K
Q232 2SC1685
R284 10K
R283 10K
2SC1685
Q231 DTA144E
D233
R280 2.2K
D234 MTZ5.1JBT
R281 100K
C282 10μ/16V
C231 0.022
Vcc
1Rx/Cx
1Cx
1Q
2Q
2CL
2B
2A
1A
1B
1CL
1Q
2Q
2Cx
2Rx/Cx
GND
IC231 MM74HC123AN
R282 10K
D232
R290 1K
D231
MUTING
D031~D033 1SS133


ENB-078-1
P604
+15V
+5V
GND
-15V
(LOGIC IC +5V)
(LOGIC IC GND)
C261 150P
R261 47K
R262 47K
IC211 1/4x2 74HC32
C263 22μ/25V
C264 22μ/25V
D261
D262
R263 22K
IC614 VC4580
R265 22K
a
b
P603
DATA
SDOUT1
SIOCK
LRCK
NC
NC
D263
R264 22K
D264
R266 22K
IC212 1/6x3 74HC04
IC213 74HC02
IC212 1/6x2 74HC04
D266
D265
P605
D. GND
NC
NC
NC
D267
R268 10K
IC212 1/6x2 74HC04
R269 1K
R267 100K
C265 220P
R270 100K
D268 MTZ2.7JTB
IC211 1/4x3 74HC32
NOTE: D261~D267 1SS133
IC212 74HC04
IC213 74HC02
IC211 74HC32
+5V
GND

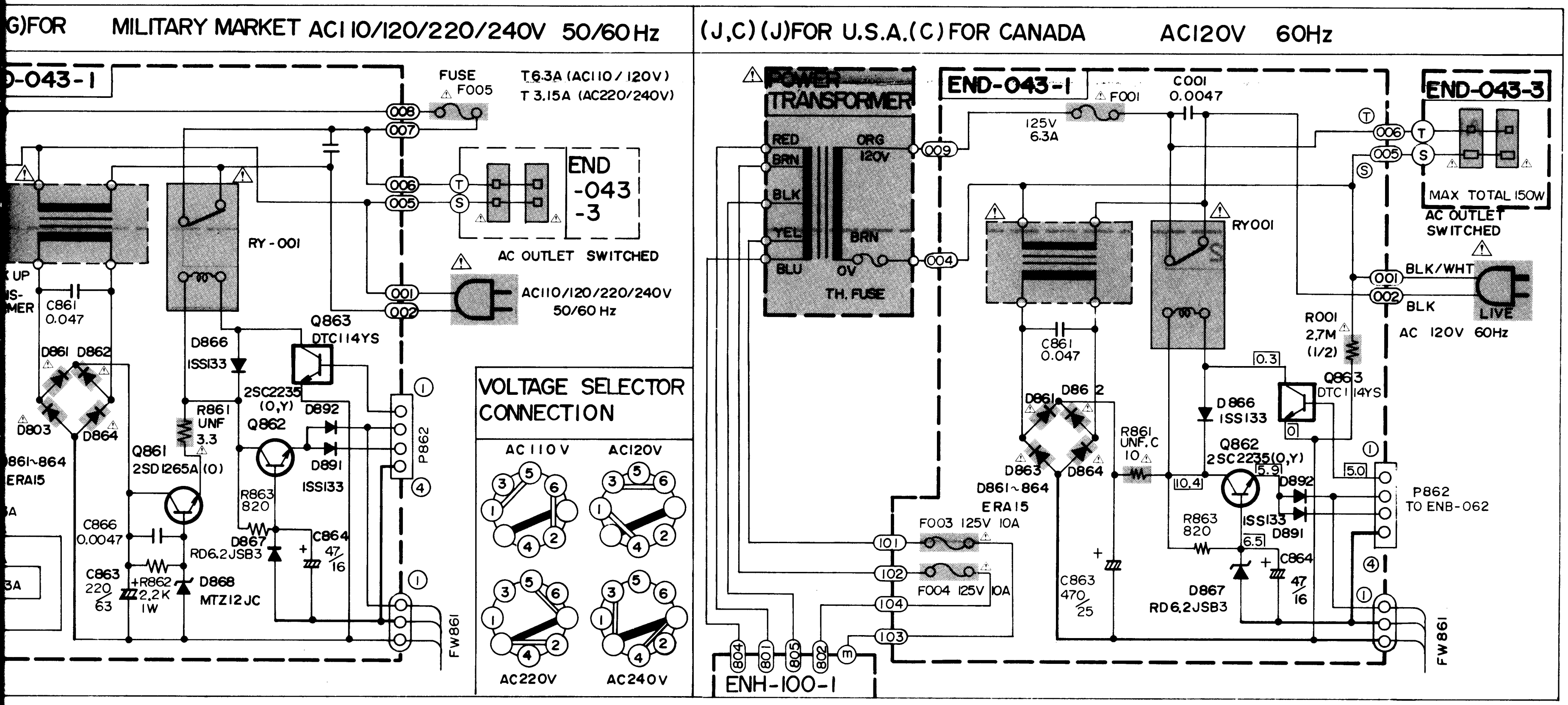
(8) Power Supply Section

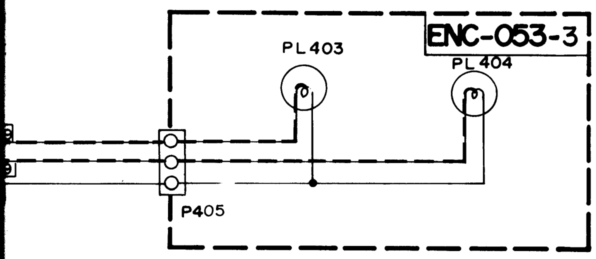

E,G,A,BS (E) FOR EUROPE (G) FOR WEST GERMANY AC 220V 50Hz
(A) FOR AUSTRALIA (BS) FOR U.K. AC 240V 50Hz
POWER TRANSFORMER
RED
BRN
BLK
YEL
BLU
240V
220V
GRY
0V
TH.FUSE
SOLID LINE FOR E,G
BROKEN LINE FOR A, BS
BACK UP TRANSFORMER
F001 T3.15A
C001 0.0047
END-043-1
FUSE E. ONLY
T1.25A
F002 T100mA
RY001
MAX 250W
AC OUTLET SWITCHED
(BLU) NEUTRAL
(BRN) LIVE
C861 0.047
D866 ISS133
DTC114YS
*R861
D861 ~ 864 ERA15-02
Q863
*R861 UNF.F
E,G 10
A, BS 22
Q862 2SC2235(O,Y)
D892
D891 ISS133
P862
R863 820
C863 470/25
C864 47/16
D867 RD6.2JSB3
F003 T6.3A
F004 T6.3A
FW861
ENH-100-1
U.P.PG (U) FOR OTHER COUNTRIES (P.PG) FOR MILITARY MARKET AC110/120/220/
120V
110V
ORN
YEW
BACK UP TRANSFORMER
C861 0.047
D861 D862
D803 D864
D861~864 ERA15
RY-001
D866 ISS133
Q863 DTC114YS
R861 UNF 3.3
2SC2235 (O,Y) Q862
Q861 2SD1265A(O)
C866 0.0047
C863 220/63
R862 2.2K 1W
RD6.2JSB3
D868 MTZ12JC
R863 820
D867
C864 47/16
D891 ISS133
FUSE F005


END-043-2
R874 82UNF.C
R875 82UNF.C
R876 56UNF.C
R877 56UNF.C
Q871 2SB1133(R,S)
-26.4
-31.3
-27.0
R871 56 2W
C871 0.0047
R872 56 2W
D871 ISS133
R873 2.2K 1/2
C872 47/50
D872 RD10JSB3
D873 RD16JSB3
R891 330
C891 0.047F 63
FW851
FW853
*R881
*R883
R885 56 2W
Q872 2SB1133(R,S)
-25.5
-34.4
-26.0
R878 56 2W
R879 56 2W
*R882
*R884
*R886
D874 ISS133
C873 0.0047
R880 2.2K1/2
D875 RD10JSB3
D876 RD15JSB3
C874 47/25
ENC-053-2
PL401
PL402
LAMP 8V 200mA
D410~412 RD8.2JSB3
D410 D411 D412
-15.9
-23.8
-7.9
-7.9
0
BC405
FW852
P853
R852
ENH-100-2
ENC-053-3
PL403
PL404
P405

*

	R881	R882	R883	R884	R886
J,C,U,P,PG	——	Short	120 2W	120 2W	68 2W
E,A,G,BS	56 2W	56 2W	68 2W	68 2W	56 2W

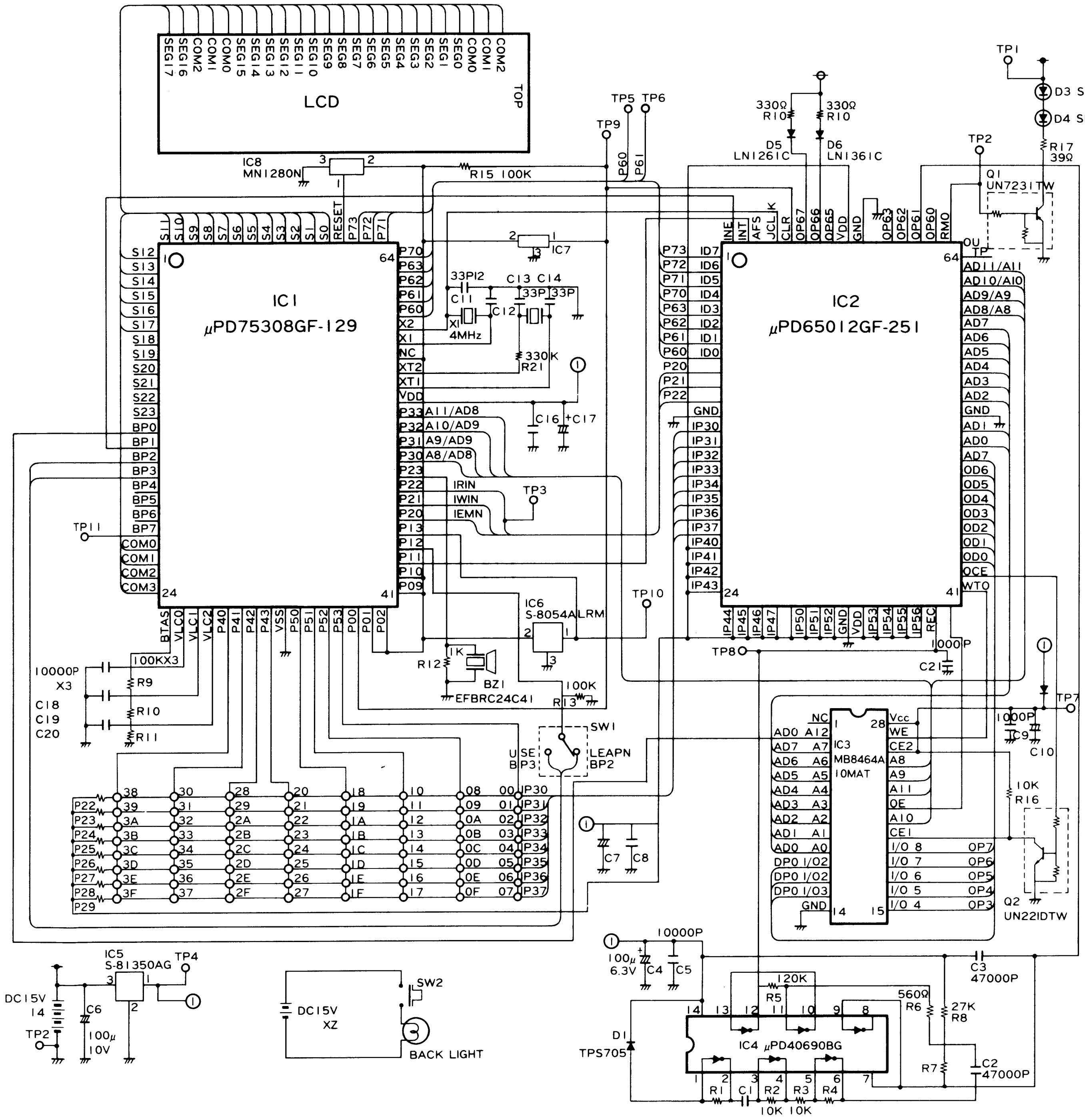

G)FOR MILITARY MARKET AC110/120/220/240V 50/60Hz
(J,C) (J)FOR U.S.A.,(C) FOR CANADA AC120V 60Hz
-043-1
FUSE F005
T6.3A (AC110/120V)
T3.15A (AC220/240V)
008
007
006
005
001
002
END -043 -3
AC OUTLET SWITCHED
AC110/120/220/240V 50/60Hz
RY-001
C861 0.047
D861 D862
D803 D864
D861~864 ERA15
D866 ISS133
Q863 DTC114YS
R861 UNF 3.3
2SC2235 (O,Y) Q862
D892 D891 ISS133
Q861 2SD1265A(O)
R863 820
D867 RD6.2JSB3
C864 47/16
C866 0.0047
C863 220/63
R862 2.2K 1W
D868 MTZ12JC
P862
FW861
VOLTAGE SELECTOR CONNECTION
AC110V
AC120V
AC220V
AC240V
POWER TRANSFORMER
RED BRN BLK YEL BLU
ORG 120V
BRN 0V
TH. FUSE
009
004
END-043-1
F001 125V 6.3A
C001 0.0047
END-043-3
MAX TOTAL 150W
AC OUTLET SWITCHED
BLK/WHT
BLK
LIVE
AC 120V 60Hz
RY001
R001 2.7M (1/2)
C861 0.047
D861 D862 D863 D864
D861~864 ERA15
R861 UNF.C 10
D866 ISS133
Q863 DTC114YS
Q862 2SC2235(O,Y)
0.3
0
5.0
10.4
5.9
6.5
D892
ISS133 D891
R863 820
C864 47/16
D867 RD6.2JSB3
C863 470/25
P862 TO ENB-062
F003 125V 10A
F004 125V 10A
101 102 104 103
804 801 805 802
ENH-100-1
FW861


ENC-053-3
PL403
PL404
P405

Notes:

1. ——— indicates +B line voltage.
2. ---- indicates −B line voltage.
3. ■ indicates signal path.
4. ■ / [■] shows DC voltage to the chassis with no signal input.
   ■ ...FM ■ ...AM
5. When replacing the parts in the shaded area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram.
   The design and circuit constants are subject to change without notice.

Remote Control Unit (RM-SR1001)


LCD
COM2 COM1 COM0 SEG0 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 COM0 COM1 COM2 SEG16 SEG17
TOP
IC8 MN1280N
R15 100K
IC1 μPD75308GF-129
IC2 μPD65012GF-251
IC3 MB8464A 10MAT
IC4 μPD40690BG
IC5 S-81350AG
IC6 S-8054ALRM
IC7
Q1 UN7231TW
Q2 UN221DTW
D3 SE303A
D4 SE303A
D5 LN1261C
D6 LN1361C
D1 TPS705
R10 330Ω
R17 39Ω
C13 C14 33P
C11 33P12
X1 4MHz
330K R21
C16 C17
IRIN IWIN IEMN
BZ1 EFBRC24C41
R12 1K
R13 100K
SW1 USE LEARN BP3 BP2
10000P X3
C18 C19 C20
100KX3
R9 R10 R11
C7 C8
C2 1000P
C9 C10 1000P
10K R16
C3 47000P
C2 47000P
R5 120K
R6 560Ω
R8 27K
R7
R1 C1 R2 R3 R4 10K 10K
C4 C5 100μ 6.3V
10000P
DC15V 14
C6 100μ 10V
DC15V XZ
SW2
BACK LIGHT
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8 TP9 TP10 TP11

Parts List (RM-SR1001)

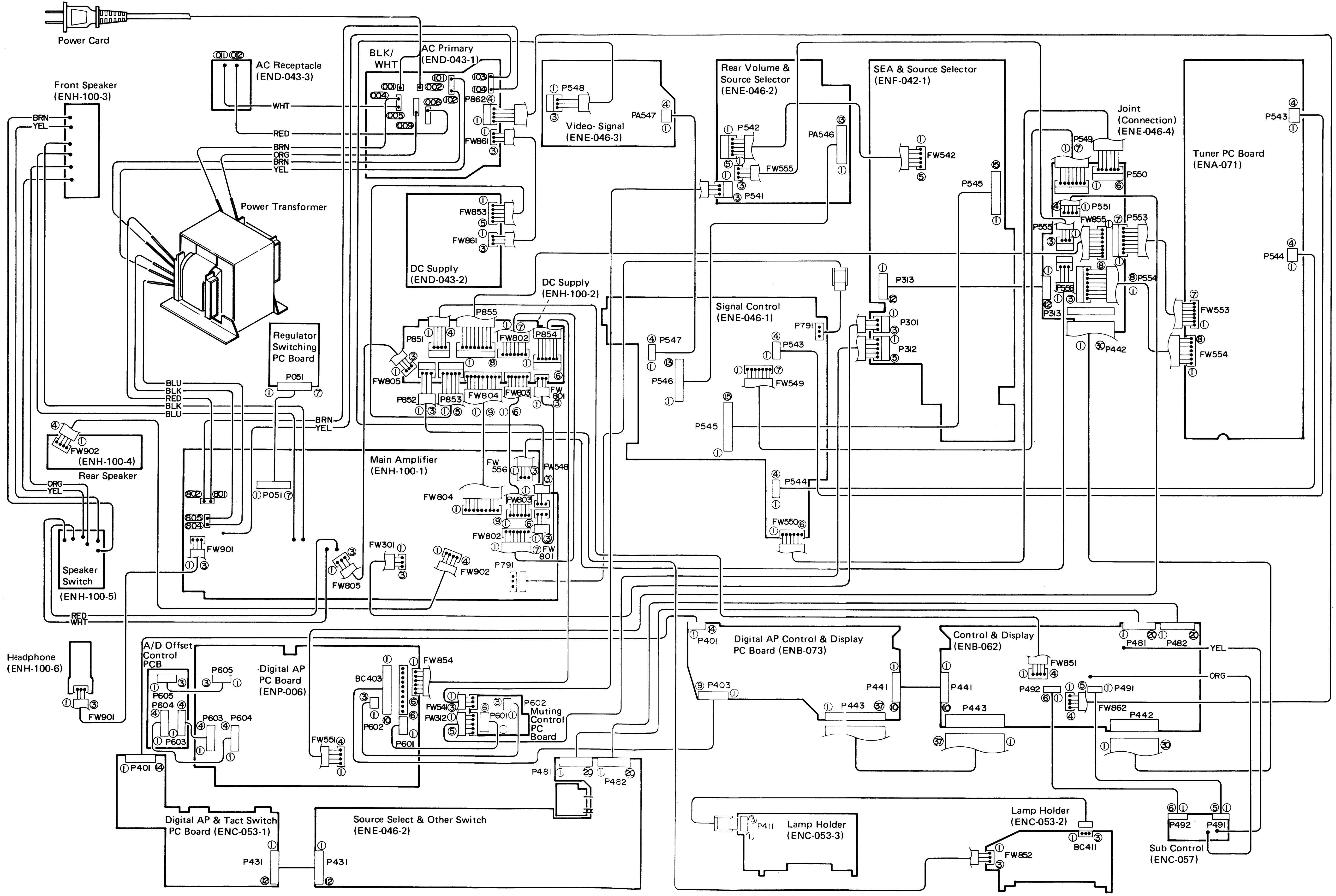
Part Number	Part Name	Q'ty	Description
EUR66CS38	Upper Case	1	
EUR66CS39	Bottom Case	1	
EUR66EC40	Battery Cover	1	
SSSB2608M	Screw	6	(Flat head, M2.6 x 8 mm)
EUR66CT47	Rubber Contact	1	4 keys (POWER / REMOTE)
EUR66CT48	Rubber Contact	1	4 keys (CLEAR, CHECK, etc.)
EUR66CT46	Rubber Contact	1	18 keys
EUR66SB41	Smoked Plate	1	(Front)
EUR64SB125	Smoked Plate	1	(Rear)
EUR64TD668	Common Contact	3	(+, −)
EUR60TD48	Common Contact	1	(+, −)
EUR66TD21	Battery Contact	1	(+)
EUR66TD22	Battery Spring	1	(−)
EUR66LB110	Label	1	(on the bottom case)
EUR52SM541	Frame Seal	1	(Rubber Frame)
EUR52AM416	Lamp	1	(be able to pull out)
EUR66SD45	Slide Knob	1	(USE / LEARN)
EUR66BT44	Push Botton	1	(for the Lamp)
EUR66FT43	Indicator	2	(LEARN / ERROR)
EUM-6010	Display Toutch Panel	1	
EUR66ST109	Sheet	1	
EUR66SC89	L.C.Display	1	
EUR66SS42	Spacer	1	

Part Number	Part Name	Q'ty	Description
EUR66VPB14	Main PC Board Ass'y	1set	(t=1.0)
μPD75308GF-129	Microcomputer	1	IC1
μPD65012GF 251	Gate Array	1	IC2
MB8464A10MAT	S-RAM	1	IC3
μPD4069UBG	C-MOS	1	IC4
S-81350AG	Regulator	1	IC5
S-8054ALRM	Voltage Detector	1	IC6
S-8054HN	Reset IC	1	IC7
MN1280N	Reset IC	1	IC8
UN7231TW	Tip Transistor	1	Q1
UN221DTW	Tip Transistor	1	Q2
CSA400MG	Ceramic Oscillator	1	X1 (4 MHz)
KF38G	Crystal Oscillator	1	X2
TPS705	Photo Diode	1	D1
MA704TW	Tip Diode	1	D2
ESD1132232	Slide Switch	1	SW1 (USE / LEARN)
EVQQAH04K	Push Switch	1	SW2 (Lamp)
EFBRC24C41	Buzzer	1	BZ1
EUR66VPB11	Sub PC Board Ass'y	1set	(t=1.2)
SE303A	LED	1	D3 (Infrared rays)
SE303A	LED	1	D4 (Infrared rays)
LN1261C	LED	1	D5 (Red)
LN1361C	LED	1	D6 (Green)

RM-SR1001

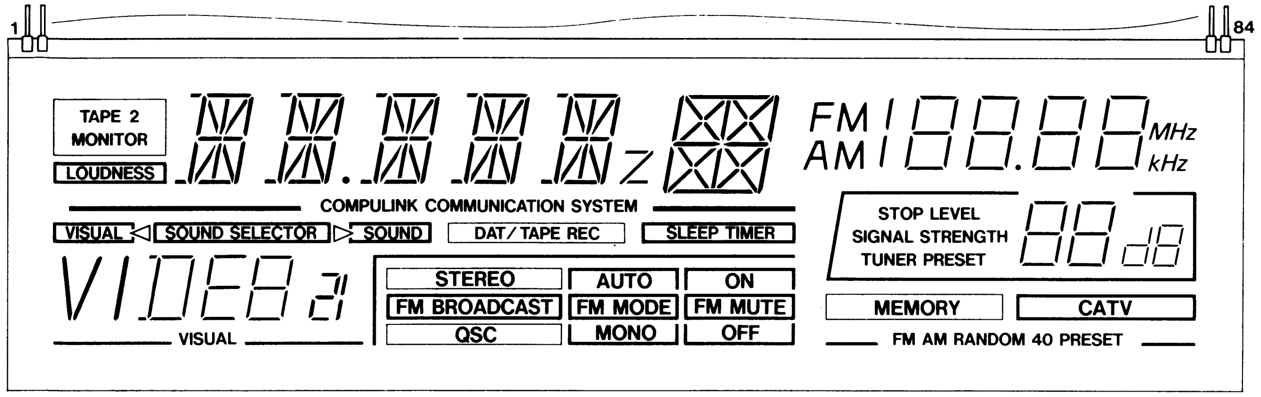
KEY NAME	KEY NUMBER	TAPE 1	DAT						CD						T V				V T R						SEA	TUNER		EXT.			VCR 2			
SELECT	07			LEARN SCREEN SWITCHING						←						←				←								←			←			
CLEAR	0F			LEARN CLEAR						←						←				←								←			←			
CHECK	17			LEARN CHECK						←						←				←								←			←			
EXT.	1F	DISPLAY SCREEN SELECTION EXT.																																
AUDIO power	3F	A3 03	←																															
TV power	37	03 17	←																															
VCR1 power	2F	43 CB	←																							←								
ON／OFF	27	REMOTE CONTROL OPERATION ON/OFF																																
on／off	26	BUZZER ON/OFF																																
SLEEP SEA	06	A3 03	A3 03	←					A3 03	←	←				A3 00	←	←		A3 03	←	←				A3 30	A3 03	A3 03	←						
1 63Hz	25		93 71	←			○	○	83 61	←			○	○	03 21	←	○	○	43 21	←			○	○	A3 31	A3 21			○	○			○	○
2 16CHz	1D		93 72	←			○	○	83 62	←			○	○	03 22	←	○	○	43 22	←			○	○	A3 32	A3 22			○	○			○	○
3 40CHz	15		93 73	←			○	○	83 63	←			○	○	03 23	←	○	○	43 23	←			○	○	A3 33	A3 23			○	○			○	○
4 1KHz	0D		93 74	←			○	○	83 64	←			○	○	03 24	←	○	○	43 24	←			○	○	A3 34	A3 24			○	○			○	○
5 SEA PR.	05		93 75	←			○	○	83 65	←			○	○	03 25	←	○	○	43 25	←			○	○	A3 38	A3 25			○	○			○	○
6 2.5KHz	24		93 76	←			○	○	83 66	←			○	○	03 26	←	○	○	43 26	←			○	○	A3 35	A3 26			○	○			○	○
7 6.3KHz	1C		93 77	←			○	○	83 67	←			○	○	03 27	←	○	○	43 27	←			○	○	A3 36	A3 27			○	○			○	○
8 16KHz	14		93 78	←			○	○	83 68	←			○	○	03 28	←	○	○	43 28	←			○	○	A3 37	A3 28			○	○			○	○
9 −DOWN	0C		93 79	←			○	○	83 69	←			○	○	03 29	←	○	○	43 29	←			○	○	A3 3B	A3 19			○	○			○	○
10 UP+	04		93 7E	←			○	○	83 6E	←			○	○											A3 3A	A3 1A			○	○				
CONT.−DOWN	23								83 77						03 18	←	○	○	43 18	←			○	○		A3 18							○	○
PRGM UP+	1B								83 71						03 19	←	○	○	43 19	←			○	○		A3 19							○	○
MAG.P.	13								83 73																									
+10	0B		93 7F	←			○	○	83 6F	←			○	○												A3 2F								
0 DAP	03		93 70	←			○	○	83 60	←			○	○	03 20	←	○	○	43 20	←			○	○	A3 05								○	○
A 1 DIR.	22	83 0B		○		○		○	83 79	○		○		○		○		○		○		○		○				○		○		○		○
B 2 SIZE	1A			○		○		○	83 7A	○		○		○		○		○		○		○		○	A3 F5			○		○		○		○
C 3 LIVE	12			○		○		○	83 7B	○		○		○		○		○		○		○		○	A3 F6			○		○		○		○
D 4 WALL	0A			○		○		○	83 7C	○		○		○		○		○		○		○		○	A3 F7			○		○		○		○
E 5 DAP M.	02			○		○		○	83 7D	○		○		○		○		○		○		○		○	A3 58			○		○		○		○
PLAY	21	83 CC	93 5C	←	○	○	○	○	83 4C	←	○	○	○	○					43 0C	←	○	○	○	○			B3 0C				○	○	○	○
STOP	19	83 03	93 53	←	○	○	○	○	83 43	←	○	○	○	○					43 03	←	○	○	○	○			B3 0C				○	○	○	○
REC OFEN	11	83 CC CD	93 8C 8D	←	○	○	○	○	83 44	←									43 CC CD	←	○	○	○	○							○	○	○	○
P −DAP	09								83 78																A3 5F							○		
RECPLAY DAP+	01				○	○	○	○	83 7E												○	○	○	○	A3 5E						○	○	○	○
PAUSE TIME	20	83 0D	83 5D	←	○	○	○	○	83 4D	←	○	○	○	○					43 CD	←	○	○	○	○	A3 48						○	○	○	○
◀◀ LBAL.	18	83 07	83 57	←	○	○	○	○	83 70	←	○	○	○	○					43 07	←	○	○	○	○	A3 0E						○	○	○	○
◀◀ RBAL.	10	83 06	83 56	←	○	○	○	○	83 76	←	○	○	○	○					43 06	←	○	○	○	○	A3 0F						○	○	○	○
⏮ −REAR	08	83 18	83 68	←	○	○	○	○	83 58	←	○	○	○	○											A3 4F									
⏭ +REAR	00	83 19	83 69	←	○	○	○	○	83 59	←	○	○	○	○											A3 4E									
TAPE1	3D		DISPLAY SCREEN SELECTION EXT.									TAPE 1																						
DAT	35											DAT																						
CD	2D											CD																						
TV	3E											TV																						
VCR1	36											VCR 1																						
DAP SEA	2E			↓								DAP SEA																						
TAPE 1	38		DISPLAY SCREEN SELECTION EXT.									TAPE 1					A3 3F																	
DAT	30											DAT					A3 06																	
CD	28											CD					A3 3																	
TV	39											TV					A3 10			43 10					(TWO TYPES OF CODES)									
VCR1	31			↓								VCR 1					A3 11			03 11					(TWO TYPES OF CODES)									
TAPE2	2A																A3 07																	
FM	32		DISPLAY SCREEN SELECTION EXT.									TUNER					A3 08																	
AM	2A											TUNER					A3 39																	
PHONE	3B											PHONO					A3 2C																	
VCR 2	33			↓								VCR 2			↓		A3 12			03 11					(TWO TYPES OF CODES)									
MUTE	3C	A3 1C	←																															
VCLUME−	34	A3 1F	←																															
VOLUME+	2C	A3 1E	←																															
		JVC STD.	JVC STD.	JVC STD.					JVC STD.	JVC STD.					JVC STD.	JVC STD.			JVC STD.	JVC STD.					JVC STD.	JVC STD.	JVC STD.							
RUNING KEY NUMBER				5	8	13	20	25	5	5	7	12	19	24		5	13	18		5	7	12	19	24				5	10	15	6	11	18	23

Connection Diagram


Power Card
AC Receptacle
(END-043-3)
BLK/
WHT
AC Primary
(END-043-1)
Front Speaker
(ENH-100-3)
BRN
YEL
WHT
RED
BRN
ORG
BRN
YEL
P862
FW861
P548
Video- Signal
(ENE-046-3)
PA547
Rear Volume &
Source Selector
(ENE-046-2)
P542
FW555
P541
PA546
SEA & Source Selector
(ENF-042-1)
FW542
P545
Joint
(Connection)
(ENE-046-4)
P549
P550
P551
FW855
P553
P555
P556
P554
P313
P442
Tuner PC Board
(ENA-071)
P543
P544
FW553
FW554
Power Transformer
FW853
FW861
DC Supply
(END-043-2)
DC Supply
(ENH-100-2)
P855
P851
FW802
P854
FW805
P852
P853
FW804
FW803
FW801
Regulator
Switching
PC Board
P051
Signal Control
(ENE-046-1)
P791
P547
P543
FW549
P546
P545
P544
FW550
P301
P312
P313
BLU
BLK
RED
BLK
BLU
BRN
YEL
FW902
(ENH-100-4)
Rear Speaker
ORG
YEL
Main Amplifier
(ENH-100-1)
FW556
FW548
FW804
FW803
FW802
FW801
P051
FW901
FW805
FW301
FW902
P791
Speaker
Switch
(ENH-100-5)
RED
WHT
Headphone
(ENH-100-6)
FW901
A/D Offset
Control
PCB
P605
P604
P603
Digital AP
PC Board
(ENP-006)
BC403
FW854
P602
P601
FW541
FW312
P602
P601
Muting
Control
PC
Board
FW551
P401
Digital AP & Tact Switch
PC Board (ENC-053-1)
P431
Source Select & Other Switch
(ENE-046-2)
P431
P481
P482
Digital AP Control & Display
PC Board (ENB-073)
P401
P403
P441
P443
Control & Display
(ENB-062)
FW851
P441
P443
P492
P491
FW862
P442
P481
P482
YEL
ORG
Lamp Holder
(ENC-053-3)
P411
Lamp Holder
(ENC-053-2)
BC411
FW852
P492
P491
Sub Control
(ENC-057)

Internal Wiring of LCD

■ ELU 0002-046 (LC421)


1
84
TAPE 2 MONITOR
LOADNESS
COMPULINK COMMUNICATION SYSTEM
VISUAL
SOUND SELECTOR
SOUND
DAT/TAPE REC
SLEEP TIMER
FM
AM
MHz
kHz
STOP LEVEL
SIGNAL STRENGTH
TUNER PRESET
dB
STEREO
AUTO
ON
FM BROADCAST
FM MODE
FM MUTE
QSC
MONO
OFF
MEMORY
CATV
VISUAL
FM AM RANDOM 40 PRESET

No,	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
COM1	A*	C*	LOADLESS	–	COM	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
COM2	B*	D*	E*	COM	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
COM3	–	–	–	–	–	COM	–	1e	1g	1f	1a	1b	1c	1d	1o	2d	2g	2f	2a	2b	2c	2d	2o	3e	3g	3f
COM4	–	–	–	–	–	–	COM	1n	1h	1k	1i	1l	1m	1j	TAPE 2 MONITOR	2n	2h	2k	2i	2l	2m	2j	DPI	3n	3h	3k

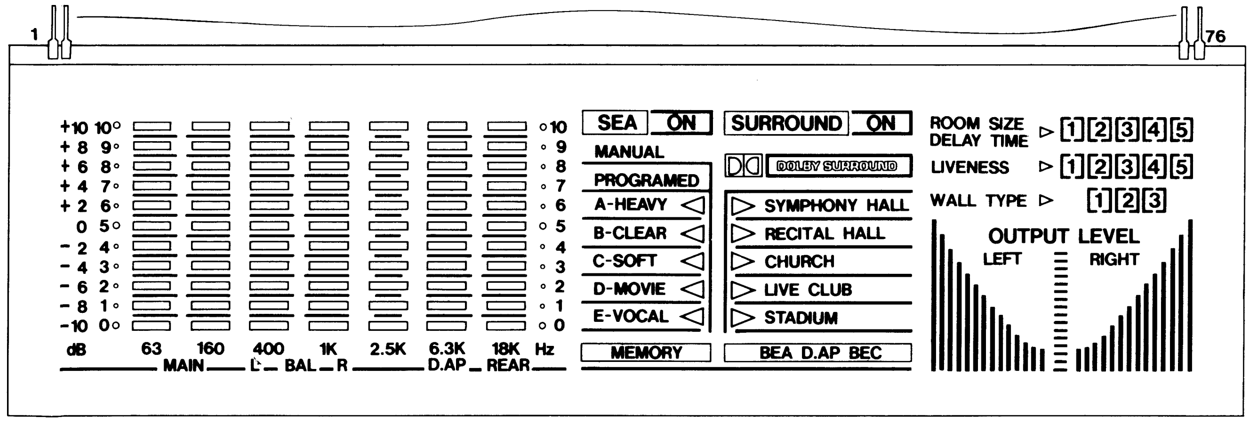
No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
COM1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
COM2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
COM3	3a	3b	3c	3d	3o	4e	4g	4f	4a	4b	4c	4d	4o	5e	5g	5f	5a	5b	5c	5d	5o	6e	6g	6f	6a	6b
COM4	3e	3f	3m	3j	DAT/ TAPE REC	4n	4h	4k	4i	4l	4m	4j	SLEEP TIMER	5n	5h	5k	5i	5l	5m	5j	Z	6n	6h	6k	6i	6l

No.	53	54	55	56
COM1	–	–	–	–
COM2	–	–	–	–
COM3	6c	6d	6p,6S	F*
COM4	6m	6j	6q,6r	6t

No.	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
COM5	–	8d	8e	8f	8g	9d	9e	9f	9g	10d	10e	10f	10g	11a,c,d,f	H*	STOP LEVEL	12d	12e	12f	12g
COM6	COM	7b,7c	8c	8a	8b	AM, kHz	9c	9c	9b	FM, MHz, DP2	10c	10a	10b	11b,e	11g	1*	–	12c	12a	12b

No.	77	78	79	80	81	82	83	84
COM5	13d	13e	13f	13g	MEMORY	AUTo ON	STEREO	COM
COM6	TUNED RESET	13c	13a	13b	CATV	MONO OFF	QSC	–

■ ELU0002-048 (LC401)


1
76
+10 10°
+8 9°
+6 8°
+4 7°
+2 6°
0 5°
-2 4°
-4 3°
-6 2°
-8 1°
-10 0°
°10
°9
°8
°7
°6
°5
°4
°3
°2
°1
°0
dB
63
160
400
1K
2.5K
6.3K
18K
Hz
MAIN
L
BAL
R
D.AP
REAR
SEA
ON
MANUAL
PROGRAMED
A-HEAVY
B-CLEAR
C-SOFT
D-MOVIE
E-VOCAL
MEMORY
SURROUND
ON
DOLBY SURROUND
SYMPHONY HALL
RECITAL HALL
CHURCH
LIVE CLUB
STADIUM
BEA D.AP BEC
ROOM SIZE
DELAY TIME
LIVENESS
WALL TYPE
1 2 3 4 5
1 2 3 4 5
1 2 3
OUTPUT LEVEL
LEFT
RIGHT

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
COM1	–	CO	A11	A9	A7	A5	A3	A1	B1	B3	B5	B7	B9	B11	C1	C3	C5	C7	C9	C11	D1	D3	D5	D7	D9	D11
COM2	COM	–	H*	A10	A8	A6	A4	A2	B2	B4	B6	B8	B10	I*	C2	C4	C6	C8	C10	J*	D2	D4	D6	D8	D10	MEMORY

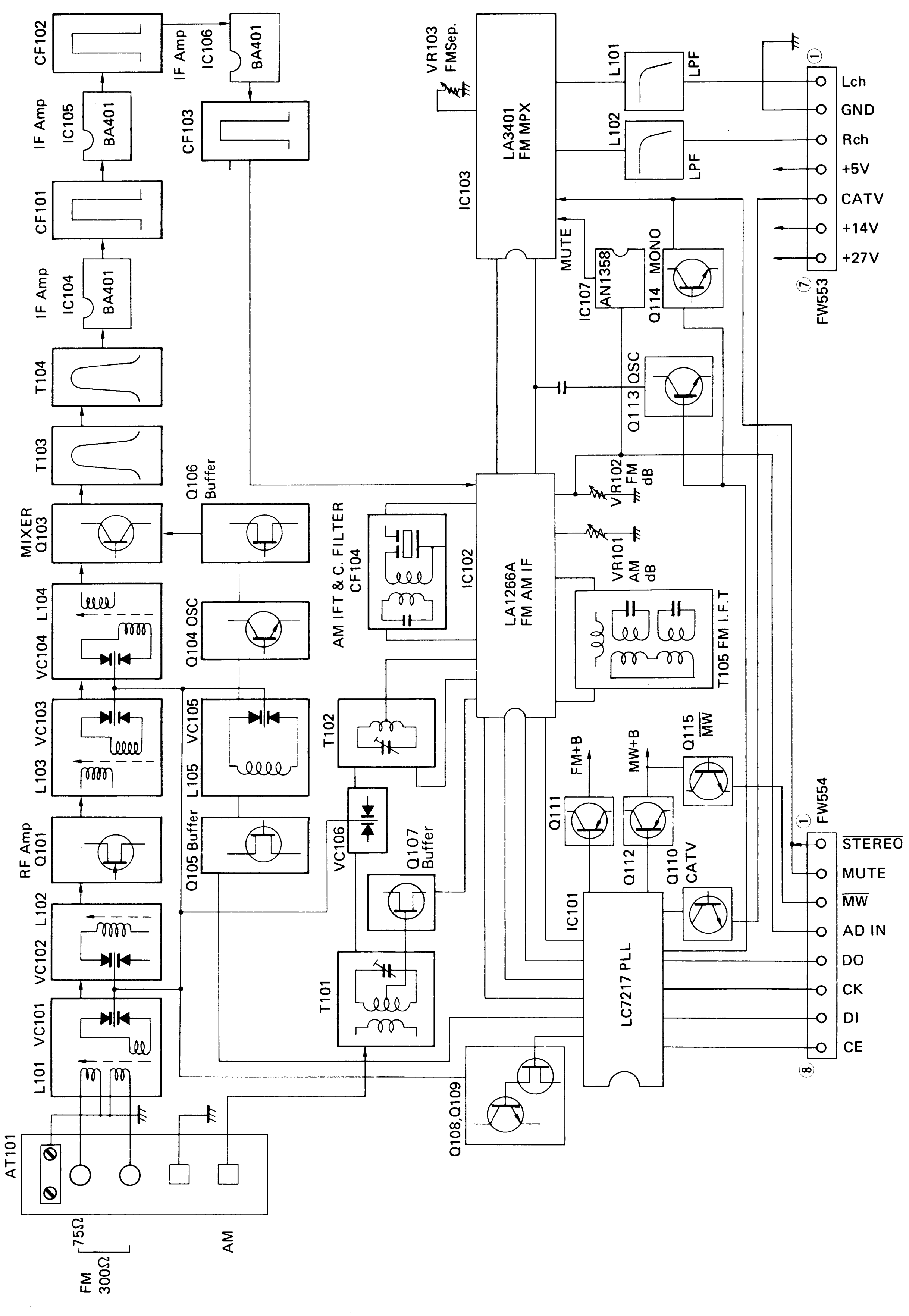
No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
COM1	E1	E3	E5	E7	E9	E11	F1	F3	F5	F7	F9	F11	G1	G3	G5	G7	G9	G11	◁4	◁2	PROGRAM	ON (SEA)
COM2	E2	E4	E6	E8	E10		F2	F4	F6	F8	F10	K*	G2	G4	G6	G8	G10	◁5	◁3	◁1	MANUAL	ON

No.	49	50	51	52	53	54	55	56	57	58	59	60	61
COM4	COM	–		7▷	9▷	ROOM SIZE	M*	[ ] (N2)	[ ] (O1)	[ ] (O3)	[ ] (O5)	[ ] (P2)	[ ] (P4)
COM4	–	COM	6▷	8▷	10▷	DOOR SIZE	[ ] (N1)	[ ] (N3)	[ ] (O2)	[ ] (O4)	[ ] (P1)	[ ] (P3)	[ ] (P5)

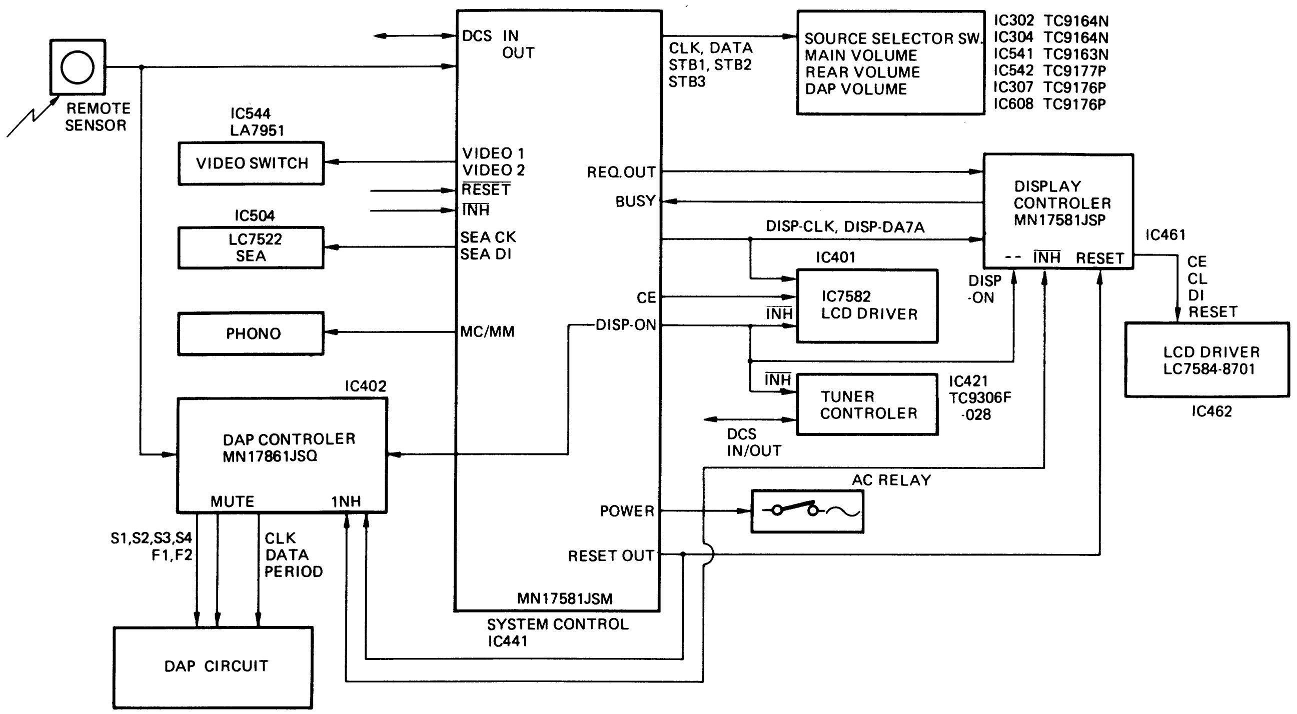
No.	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
COM5	COM	–	1L	2L	3L	4L	5L	6L	7L	8L	9L	10L	11L	12L	13L
COM6	–	COM	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R	12R	13R

Block Diagram

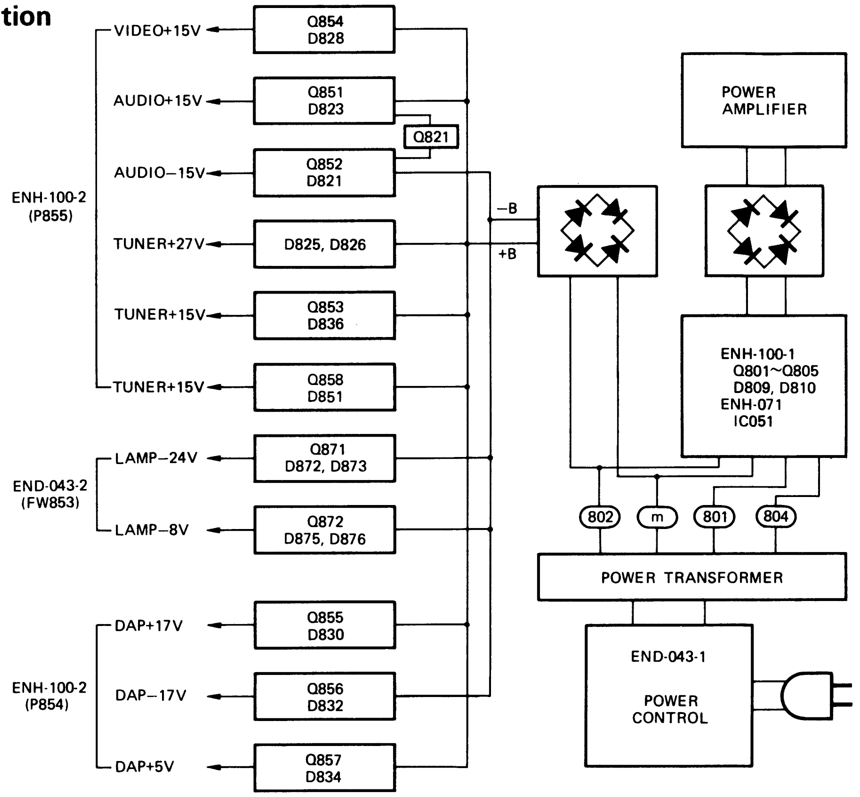
(1) Tuner Section


CF102
IF Amp
IC106
BA401
VR103
FMSep.
IF Amp
IC105
BA401
CF103
LA3401
FM MPX
IC103
L101
LPF
L102
LPF
①
Lch
GND
Rch
+5V
CATV
+14V
+27V
⑦
FW553
CF101
IF Amp
IC104
BA401
MUTE
IC107
AN1358
Q114 MONO
T104
Q113 OSC
T103
Q106
Buffer
VR102
FM
dB
MIXER
Q103
AM IFT & C. FILTER
CF104
IC102
LA1266A
FM AM IF
VR101
AM
dB
L104
VC104
Q104 OSC
T105 FM I.F.T
L103
VC103
L105
VC105
T102
Q115
MW
FM+B
MW+B
①
FW554
RF Amp
Q101
Q105 Buffer
VC106
Q107
Buffer
Q111
Q112
Q110
CATV
STEREO
MUTE
MW
AD IN
DO
CK
DI
CE
⑧
L102
VC102
IC101
T101
LC7217 PLL
VC101
L101
Q108,Q109
AT101
75Ω
300Ω
FM
AM

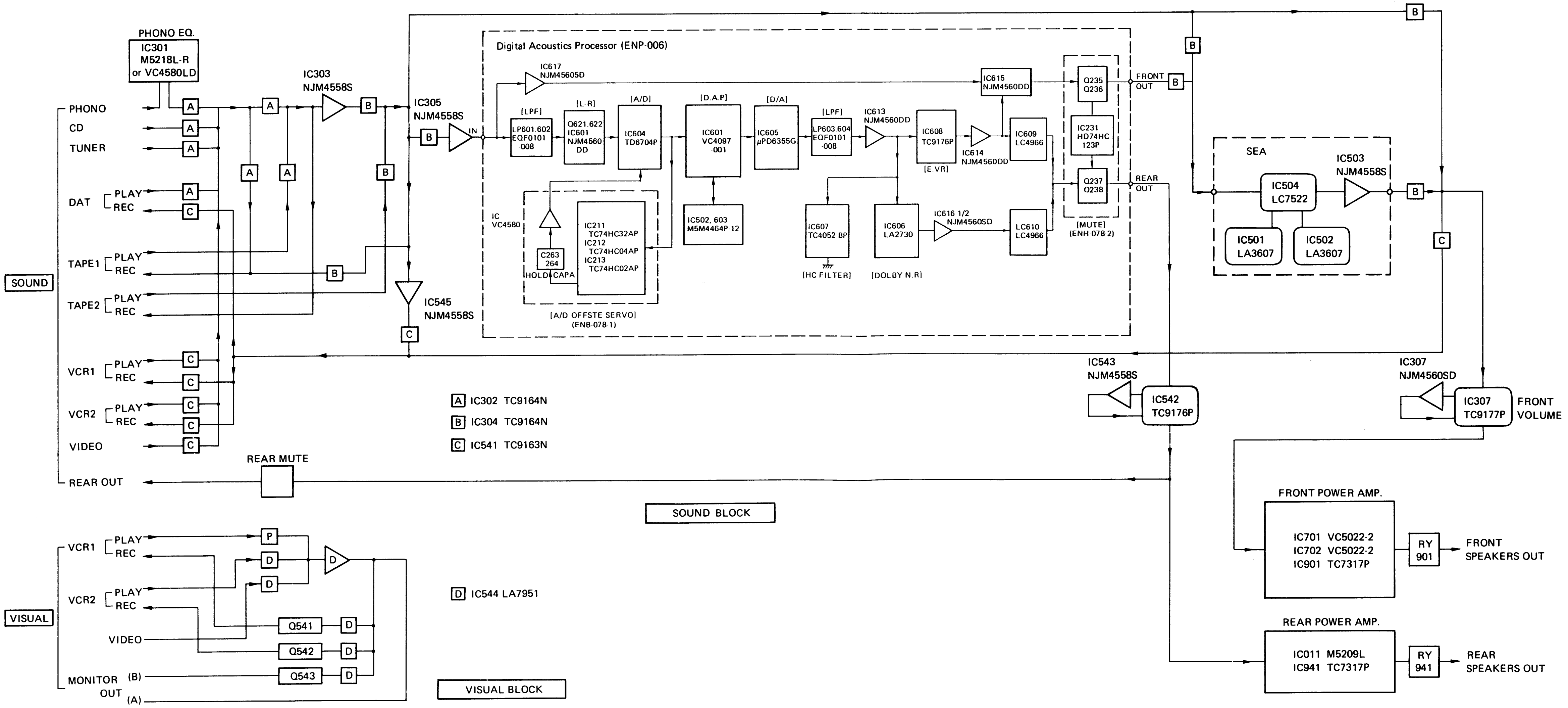
(2) Control Section


REMOTE SENSOR
DCS IN
OUT
IC544
LA7951
VIDEO SWITCH
VIDEO 1
VIDEO 2
RESET
INH
IC504
LC7522
SEA
SEA CK
SEA DI
PHONO
MC/MM
IC402
DAP CONTROLER
MN17861JSQ
MUTE
1NH
S1,S2,S3,S4
F1,F2
CLK
DATA
PERIOD
DAP CIRCUIT
MN17581JSM
SYSTEM CONTROL
IC441
CLK, DATA
STB1, STB2
STB3
SOURCE SELECTOR SW.
MAIN VOLUME
REAR VOLUME
DAP VOLUME
IC302 TC9164N
IC304 TC9164N
IC541 TC9163N
IC542 TC9177P
IC307 TC9176P
IC608 TC9176P
REQ.OUT
BUSY
DISPLAY CONTROLER
MN17581JSP
DISP-CLK, DISP-DA7A
IC401
IC7582
LCD DRIVER
CE
INH
DISP-ON
DISP
-ON
INH
RESET
IC461
CE
CL
DI
RESET
LCD DRIVER
LC7584-8701
IC462
INH
TUNER
CONTROLER
IC421
TC9306F
-028
DCS
IN/OUT
AC RELAY
POWER
RESET OUT

(4) Power Supply Section


VIDEO+15V
Q854
D828
AUDIO+15V
Q851
D823
Q821
AUDIO−15V
Q852
D821
ENH-100-2
(P855)
TUNER+27V
D825, D826
TUNER+15V
Q853
D836
TUNER+15V
Q858
D851
END-043-2
(FW853)
LAMP−24V
Q871
D872, D873
LAMP−8V
Q872
D875, D876
ENH-100-2
(P854)
DAP+17V
Q855
D830
DAP−17V
Q856
D832
DAP+5V
Q857
D834
−B
+B
POWER
AMPLIFIER
ENH-100-1
Q801~Q805
D809, D810
ENH-071
IC051
802
m
801
804
POWER TRANSFORMER
END-043-1
POWER
CONTROL

(3) Audio Section


PHONO EQ.
IC301
M5218L-R
or VC4580LD
PHONO
CD
TUNER
DAT
PLAY
REC
TAPE1
PLAY
REC
TAPE2
PLAY
REC
SOUND
VCR1
PLAY
REC
VCR2
PLAY
REC
VIDEO
REAR OUT
REAR MUTE
IC303
NJM4558S
IC305
NJM4558S
IN
IC545
NJM4558S
Digital Acoustics Processor (ENP-006)
IC617
NJM45605D
[LPF]
LP601.602
EQF0101
-008
[L-R]
Q621.622
IC601
NJM4560
DD
[A/D]
IC604
TD6704P
[D.A.P]
IC601
VC4097
-001
[D/A]
IC605
μPD6355G
[LPF]
LP603.604
EQF0101
-008
IC613
NJM4560DD
IC608
TC9176P
[E.VR]
IC614
NJM4560DD
IC615
NJM4560DD
IC609
LC4966
Q235
Q236
IC231
HD74HC
123P
Q237
Q238
[MUTE]
(ENH-078-2)
FRONT
OUT
REAR
OUT
IC
VC4580
C263
264
HOLD
CAPA
IC211
TC74HC32AP
IC212
TC74HC04AP
IC213
TC74HC02AP
[A/D OFFSTE SERVO]
(ENB-078-1)
IC502, 603
M5M4464P-12
IC607
TC4052 BP
[HC FILTER]
IC606
LA2730
[DOLBY N.R]
IC616 1/2
NJM4560SD
LC610
LC4966
SEA
IC504
LC7522
IC503
NJM4558S
IC501
LA3607
IC502
LA3607
A IC302 TC9164N
B IC304 TC9164N
C IC541 TC9163N
IC543
NJM4558S
IC542
TC9176P
IC307
NJM4560SD
IC307
TC9177P
FRONT
VOLUME
SOUND BLOCK
FRONT POWER AMP.
IC701 VC5022-2
IC702 VC5022-2
IC901 TC7317P
RY
901
FRONT
SPEAKERS OUT
REAR POWER AMP.
IC011 M5209L
IC941 TC7317P
RY
941
REAR
SPEAKERS OUT
VISUAL
VCR1
PLAY
REC
VCR2
PLAY
REC
VIDEO
MONITOR
OUT
(B)
(A)
P
D
Q541
Q542
Q543
D IC544 LA7951
VISUAL BLOCK

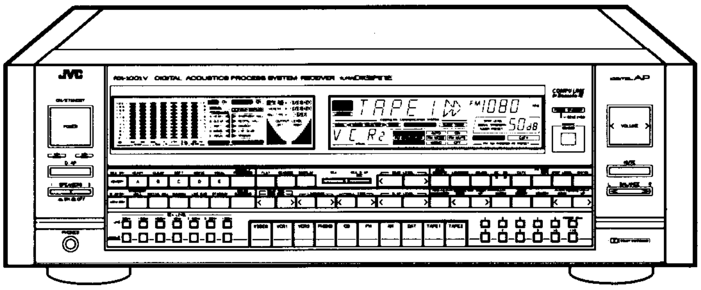
JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. RX-1001VBK

Supplement



A part of circuit in this machine is modified for the purpose of superior quality.

Use this manual reffering to the previously published Service Manual (No. 20057, Jun. 1988),

No. 20057B
Aug. 1988

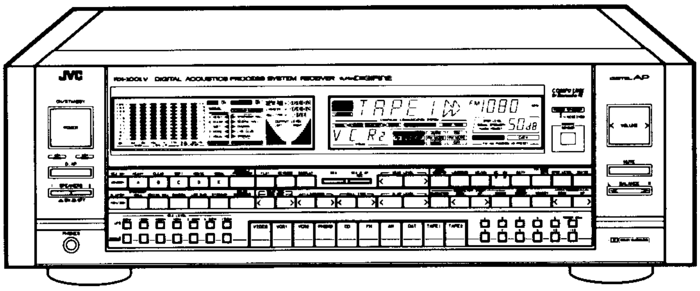
JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. RX-1001VBK

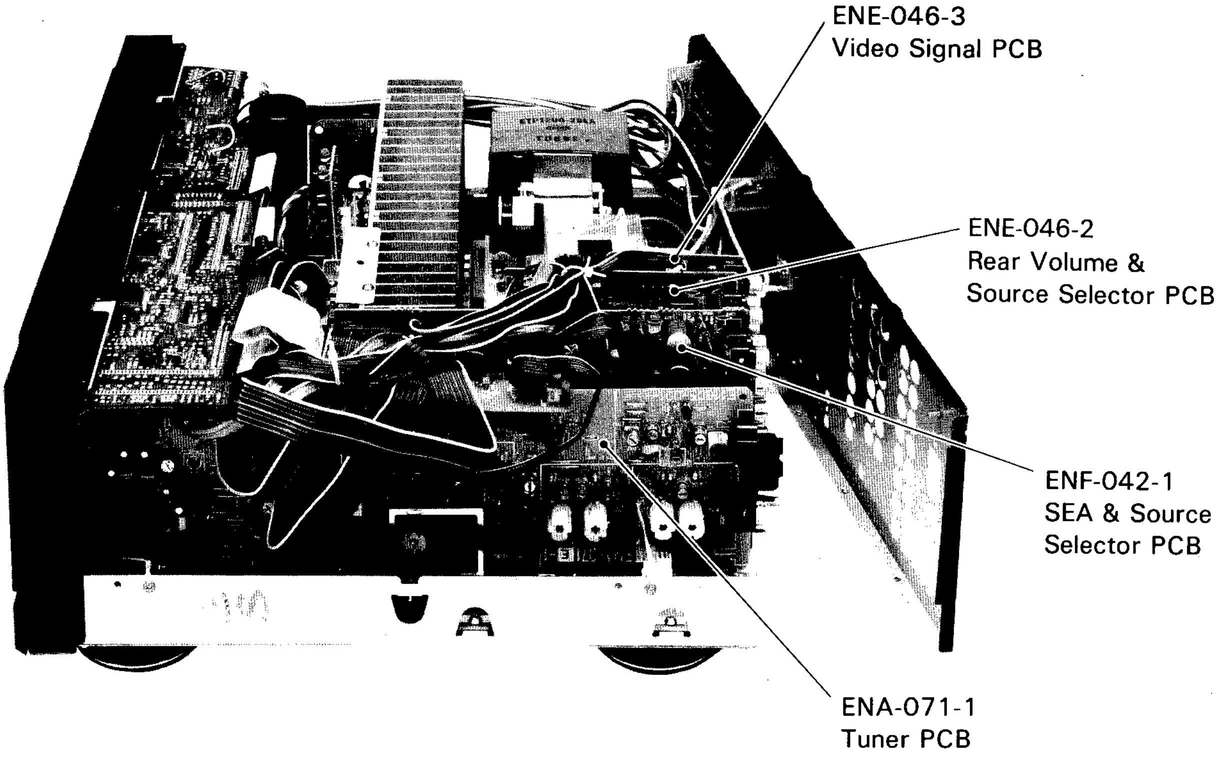
Supplement



How to check that current is flowing to the IN/OUT Pin Jack PC Boards is described in this supplement.

No. 20057C
Oct. 1988

Checking current flowing in IN/OUT Pin Jack PC Boards



1. **Remove the rear panal as shown above.**
2. **Video Signal PC Board:**
   The current flowing in this board can be checked from the pattern side in most cases. However, before checking Q543, first remove the Rear Volume & Source Selector PCB from the base PC board.
3. **Rear Volume & Source Selector PC Board:**
   When checking the current flowing in this board, first remove the Video Signal PC board from the base board. At this time, ground P547 pin ① on the base PC board by connecting it to the chassis.
4. **SEA & Source Selector PC Board:**
   When checking the current flowing in this board, remove the Rear Volume & Source Selector PC board from the base PC board. At this time, if the Tuner PC board has been removed, the current be checked easily. (To remove the Tuner PC board, remove two fasteners, three screws and one plastic rivet.)
5. **One-point hints:**

* If IC501 is defective, the L-channel of the SEA circuit will be abnormal.

* If IC503 is defective, the volume circuit will be abnormal.

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCTS DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

(No. 20057C)

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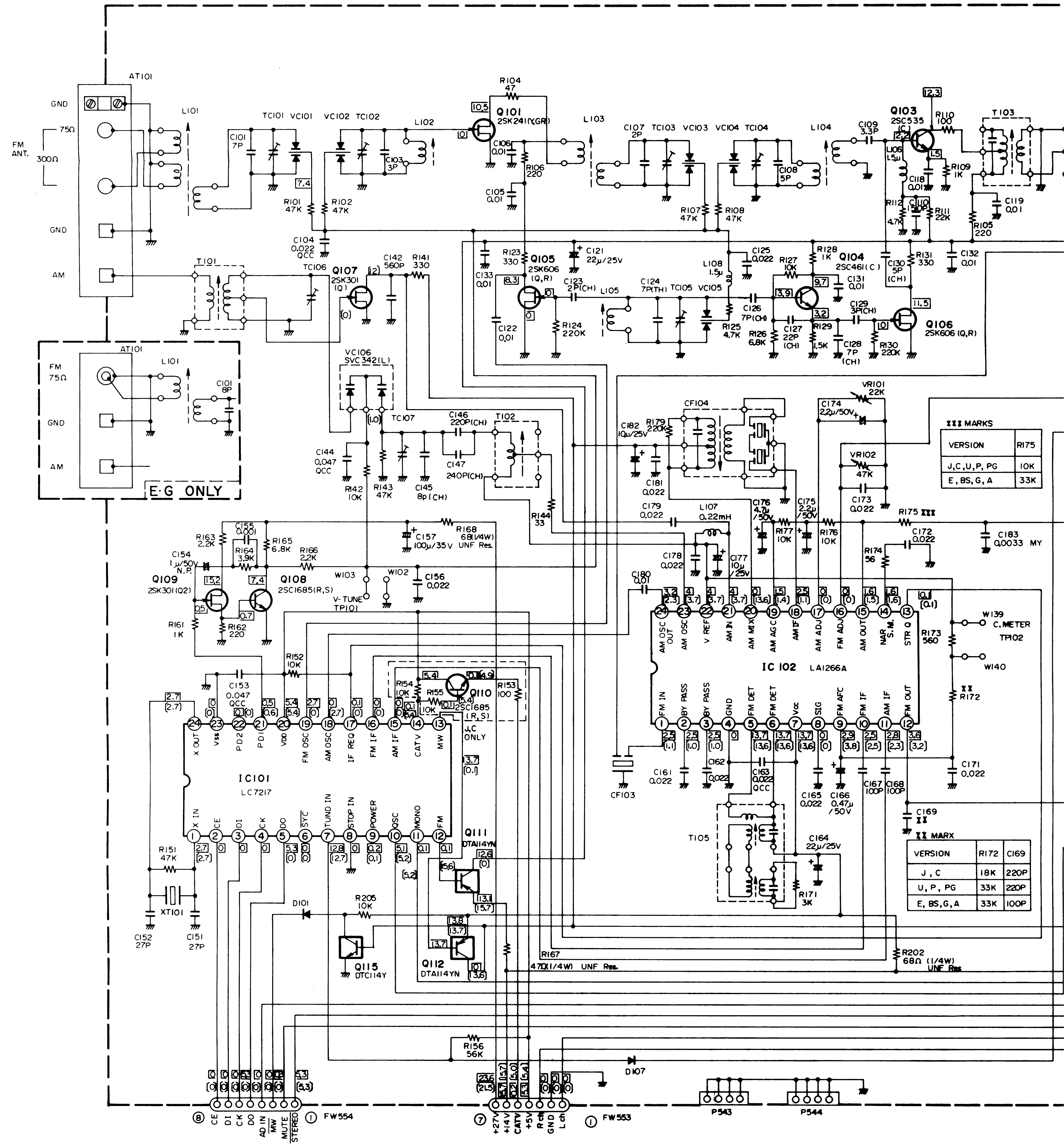
8810 [N]

Schematic Diagrams

(1) Tuner Section



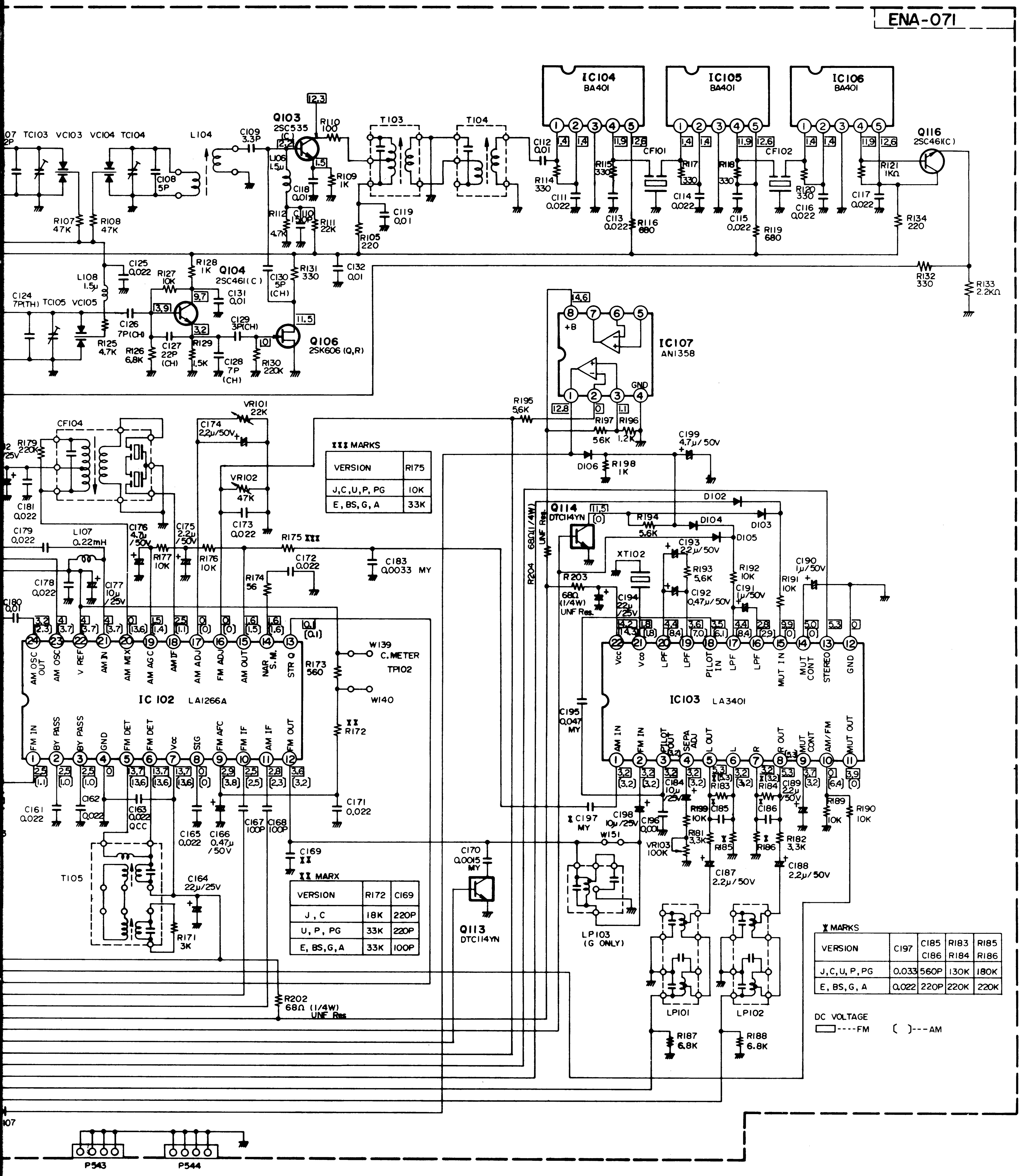
AT101
FM ANT.
75Ω
300Ω
GND
AM
L101
TC101 VC101 VC102 TC102
C101 7P
L102
R101 47K
R102 47K
C103 3P
C104 0.022 QCC
Q101 2SK241(Y,GR)
R104 47
C106 0.01
R106 220
C105 0.01
L103
C107 2P TC103 VC103 VC104 TC104
C108 5P
R107 47K
R108 47K
L104
C109 3.3P
Q103 2SC535 (C)
R110 100
L106 1.5μ
C118 0.01
R109 1K
C110 15P
R111 22K
R112 4.7K
C119 0.01
R105 220
T103
T101
TC106
Q107 2SK301 (Q)
C142 560P
R141 330
Q105 2SK606 (Q,R)
R123 330
C121 22μ/25V
C133 0.01
C122 0.01
C123 2P(CH)
R124 220K
L105
C124 7P(TH) TC105 VC105
L108 1.5μ
C125 0.022
R127 10K
R128 1K
Q104 2SC461(C)
C130 5P (CH)
R131 330
C132 0.01
C131 0.01
C126 7P(CH)
R125 4.7K
R126 6.8K
C127 22P (CH)
R129 1.5K
C128 7P (CH)
C129 3P(CH)
R130 220K
Q106 2SK606 (Q,R)
E·G ONLY
C101 8P
VC106 SVC342(L)
TC107
C146 220P(CH)
T102
C147 240P(CH)
C144 0.047 QCC
R142 10K
R143 47K
C145 8p (CH)
R144 33
CF104
R179 220K
C182 10μ/25V
C181 0.022
C179 0.022
L107 0.22mH
C178 0.022
C177 10μ /25V
C180 0.01
C176 4.7μ /50V
C175 2.2μ /50V
R177 10K
R176 10K
C174 2.2μ/50V
VR101 22K
VR102 47K
C173 0.022
R175 ⧗⧗⧗
C172 0.022
C183 0.0033 MY
R174 56
IC102 LA1266A
AM OSC OUT
AM OSC
V REF
AM IN
AM MIX
AM AGC
AM IF
AM ADJ
FM ADJ
AM OUT
NAR S.M.
STR Q
FM IN
BY PASS
BY PASS
GND
FM DET
FM DET
Vcc
SIG
FM AFC
FM IF
AM IF
FM OUT
W139 C.METER TP102
W140
R173 560
R172 ⧗⧗
C171 0.022
C169 ⧗⧗
CF103
C161 0.022
C162 0.022
C163 0.022 QCC
C165 0.022
C166 0.47μ /50V
C167 100P
C168 100P
T105
C164 22μ/25V
R171 3K
R202 68Ω (1/4W) UNF Res.
R163 2.2K
C155 0.001
R164 3.9K
R165 6.8K
R166 2.2K
C154 1μ/50V N.P.
Q109 2SK301(Q2)
Q108 2SC1685(R,S)
R161 1K
R162 220
R168 68(1/4W) UNF Res.
C157 100μ/35V
W103
W102
C156 0.022
V-TUNE TP101
R152 10K
C153 0.047 QCC
R154 10K
R155 10K
Q110 2SC1685 (R,S)
R153 100
J,C ONLY
IC101 LC7217
X OUT
Vss
PD2
PD1
VDD
FM OSC
AM OSC
IF REQ
FM IF
AM IF
CATV
MW
X IN
CE
DI
CK
DO
SYC
TUND IN
STOP IN
POWER
OSC
MONO
FM
Q111 DTA114YN
R151 47K
XT101
C152 27P
C151 27P
D101
R205 10K
Q115 DTC114Y
Q112 DTA114YN
R167 47Ω(1/4W) UNF Res.
R156 56K
D107
FW554
CE DI CK DO AD IN MW MUTE STEREO
FW553
+27V +14V CATV +5V Rch GND Lch
P543
P544

⧗⧗⧗ MARKS

VERSION	R175
J,C,U,P,PG	10K
E,BS,G,A	33K

⧗⧗ MARX

VERSION	R172	C169
J,C	18K	220P
U,P,PG	33K	220P
E,BS,G,A	33K	100P


ENA-071
IC104 BA401
IC105 BA401
IC106 BA401
IC107 AN1358
IC102 LA1266A
IC103 LA3401
Q103 2SC535 (C)
Q104 2SC461 (C)
Q106 2SK606 (Q,R)
Q116 2SC461(C)
Q114 DTC114YN
Q113 DTC114YN
T103
T104
T105
CF101
CF102
CF104
XT102
LP101
LP102
LP103 (G ONLY)
W139 C.METER TP102
W140
W151
P543
P544
R202 68Ω (1/4W) UNF Res.
R204 68Ω (1/4W) UNF Res.
R203 68Ω (1/4W) UNF Res.

XXX MARKS

VERSION	R175
J, C, U, P, PG	10K
E, BS, G, A	33K

XX MARX

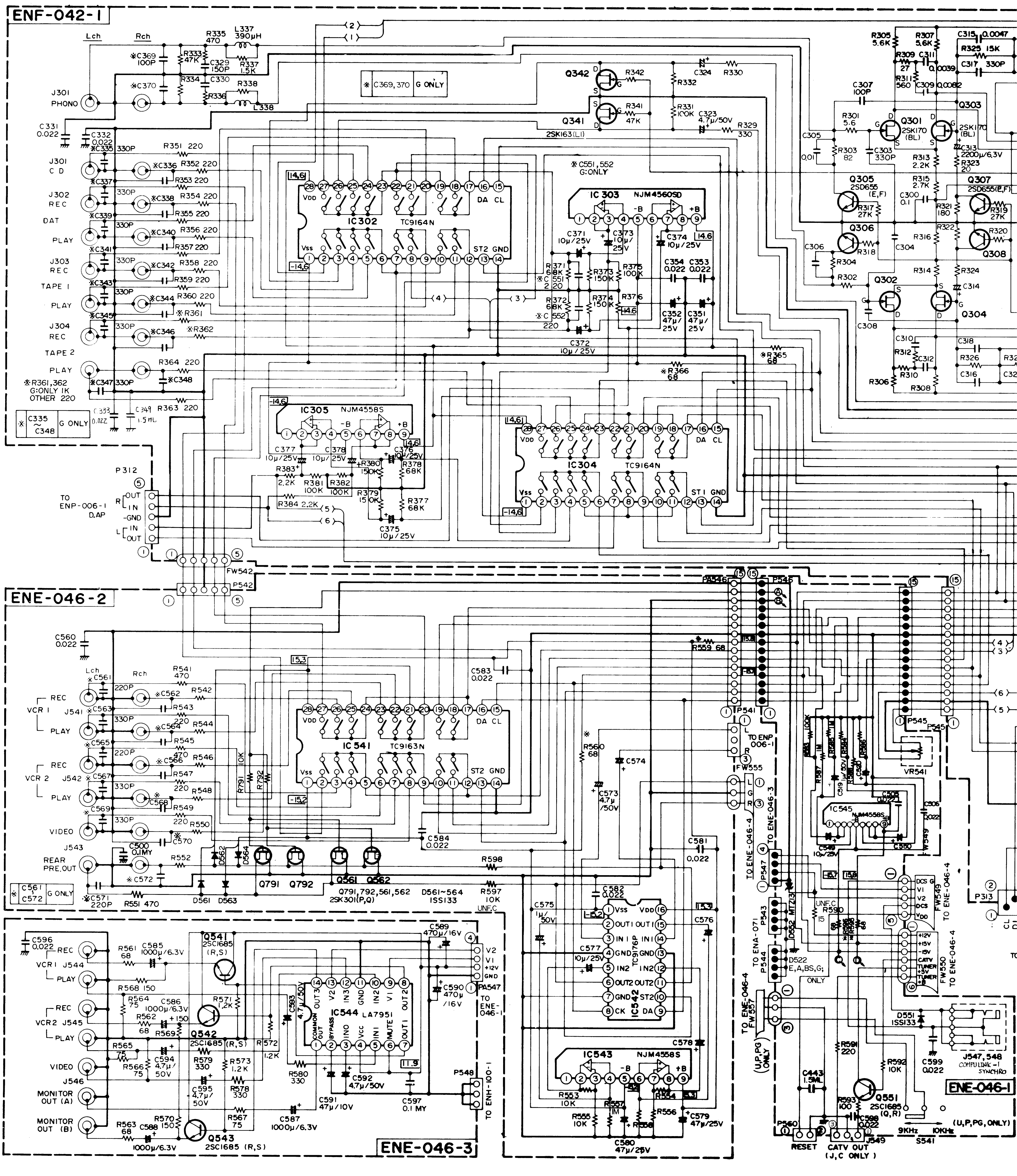
VERSION	R172	C169
J, C	18K	220P
U, P, PG	33K	220P
E, BS, G, A	33K	100P

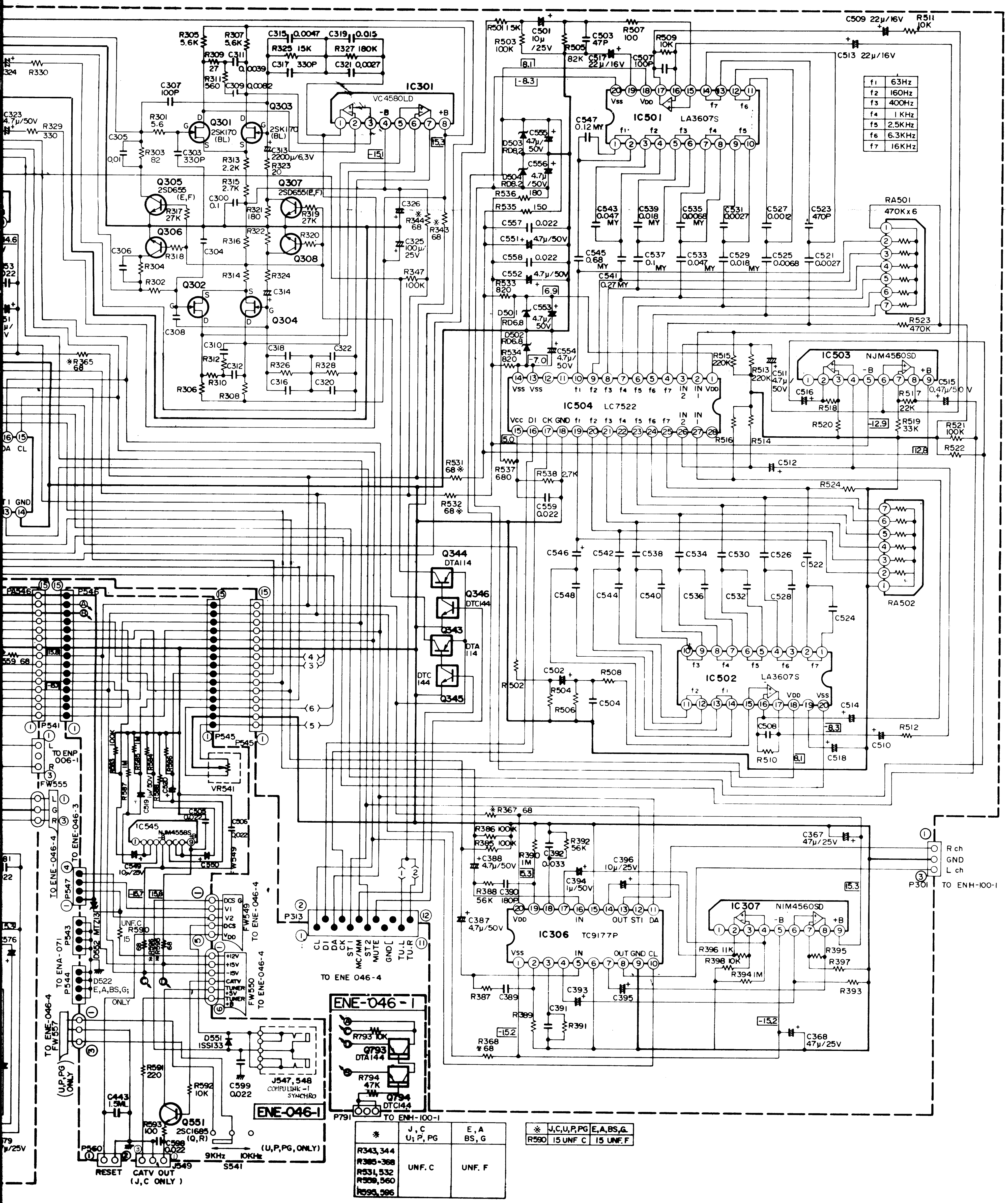
X MARKS

VERSION	C197	C185 C186	R183 R184	R185 R186
J, C, U, P, PG	0.033	560P	130K	180K
E, BS, G, A	0.022	220P	220K	220K

DC VOLTAGE
▭----FM　　( )---AM

(2) Audio/Video Input Section


ENF-042-1
ENE-046-2
ENE-046-3
ENE-046-1
J301 PHONO
J301 CD
J302 REC
DAT
PLAY
J303 REC
TAPE 1
PLAY
J304 REC
TAPE 2
PLAY
Lch
Rch
※C369,370 G ONLY
※C335~C348 G ONLY
※R361,362 G:ONLY 1K OTHER 220
※C551,552 G:ONLY
Q342
Q341
2SK163(L1)
Q301 2SK170 (BL)
Q303 2SK170 (BL)
Q305 2SD655 (E,F)
Q306
Q307 2SD655(E,F)
Q308
Q302
Q304
IC302 TC9164N
IC303 NJM4560SD
IC304 TC9164N
IC305 NJM4558S
P312
TO ENP-006-1 D.AP
R OUT
IN
GND
L IN
OUT
FW542
P542
VCR 1 J541 REC
PLAY
VCR 2 J542 REC
PLAY
VIDEO J543
REAR PRE.OUT
※C561, C572 G ONLY
IC541 TC9163N
Q791
Q792
Q561
Q562
Q791,792,561,562 2SK301(P,Q)
D561~564 1SS133
D561
D563
UNF.C
IC542 TC9176P
IC543 NJM4558S
IC545 NJM4558S
PA546
P546
P541
TO ENP 006-1
FW555
TO ENE-046-3
TO ENE-046-4
P547
P543
TO ENA-071
P544
D522 E,A,BS,G; ONLY
D552 MTZ13
VR541
P545
FW549
TO ENE-046-4
FW550
P313
TO ENE-046-4 FW557
(U,P,PG ONLY)
D551 1SS133
J547,548 COMPU LINK-1 SYNCHRO
Q551 2SC1685 (Q,R)
P560 RESET
CATV OUT (J,C ONLY)
J549
9KHz 10KHz S541
(U,P,PG,ONLY)
VCR1 J544 REC
PLAY
VCR2 J545 REC
PLAY
VIDEO J546
MONITOR OUT (A)
MONITOR OUT (B)
Q541 2SC1685 (R,S)
Q542 2SC1685 (R,S)
Q543 2SC1685 (R,S)
IC544 LA7951
PA547
TO ENE-046-1
P548
TO ENH-100-1

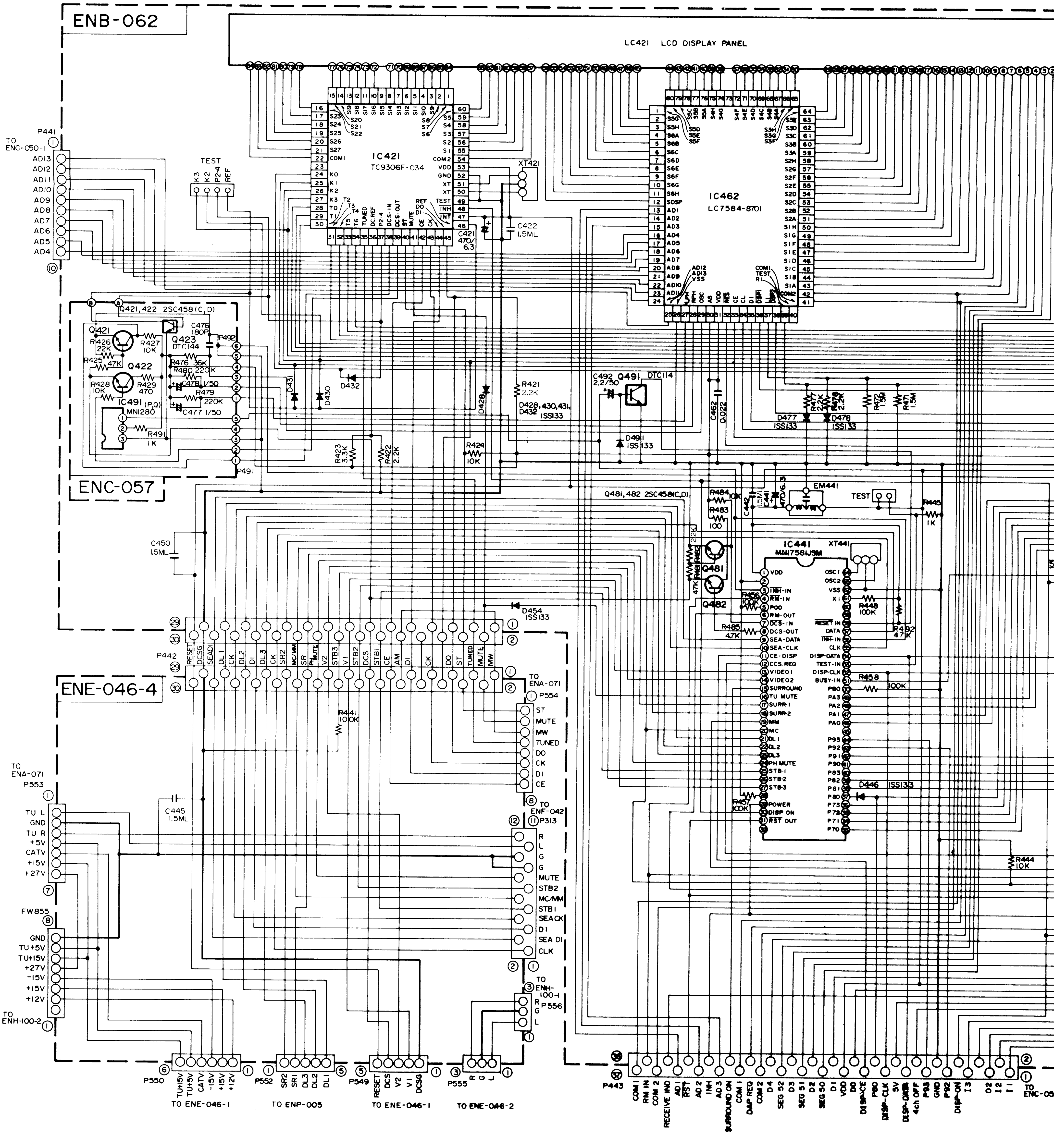

IC301 VC4580LD
IC501 LA3607S
IC502 LA3607S
IC503 NJM4560SD
IC504 LC7522
IC306 TC9177P
IC307 NJM4560SD
IC545 NJM4558S
Q301 2SK170 (BL)
Q303 2SK170 (BL)
Q302
Q304
Q305 2SD655 (E,F)
Q306
Q307 2SD655(E,F)
Q308
Q344 DTA114
Q346 DTC144
Q343 DTA 114
Q345 DTC 144
Q551 2SC1685 (Q,R)
Q793 DTA144
Q794 DTC144
RA501 470K x 6
RA502
VR541
D551 1SS133
J547, 548 COMPU LINK - I SYNCHRO
ENE-046-I
P313 TO ENE 046-4
P791 TO ENH-100-1
P301 TO ENH-100-I
R ch
GND
L ch
P541 TO ENP 006-1
FW555
TO ENE-046-3
TO ENE-046-4
TO ENA-071
FW557
(U,P,PG ONLY)
FW549 TO ENE-046-4
FW550 TO ENE-046-4
P560 RESET
CATV OUT (J,C ONLY)
J549
S541 9KHz 10KHz
(U,P,PG, ONLY)
D522 E,A,BS,G; ONLY
CL DI DA CK ST1 MC/MM ST2 MUTE GND TU.L TU.R

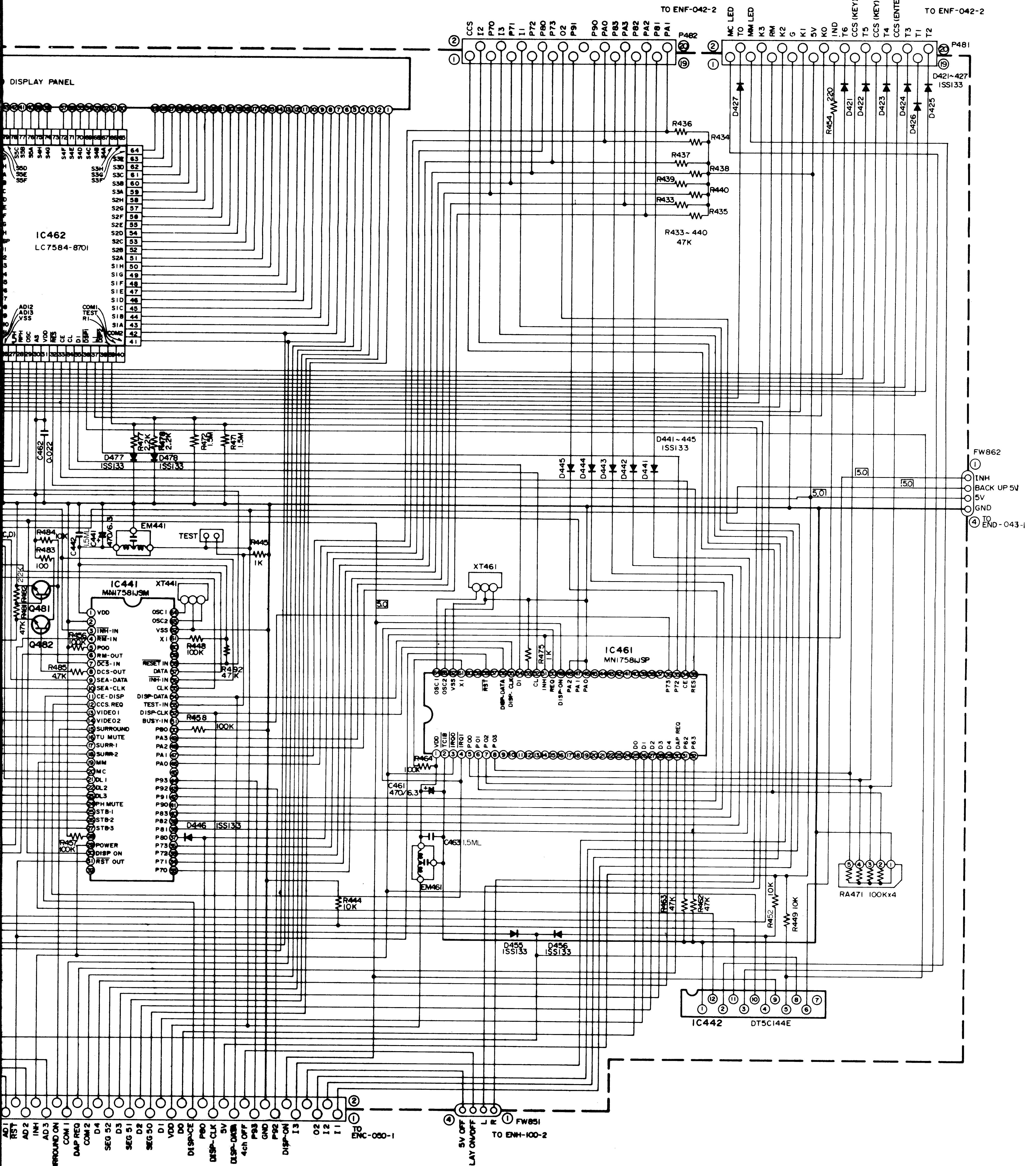
f1	63Hz
f2	160Hz
f3	400Hz
f4	1 KHz
f5	2.5KHz
f6	6.3KHz
f7	16KHz

*	J , C U; P, PG	E , A BS , G
R343, 344 R385-368 R531, 532 R559, 560 R595, 596	UNF. C	UNF. F

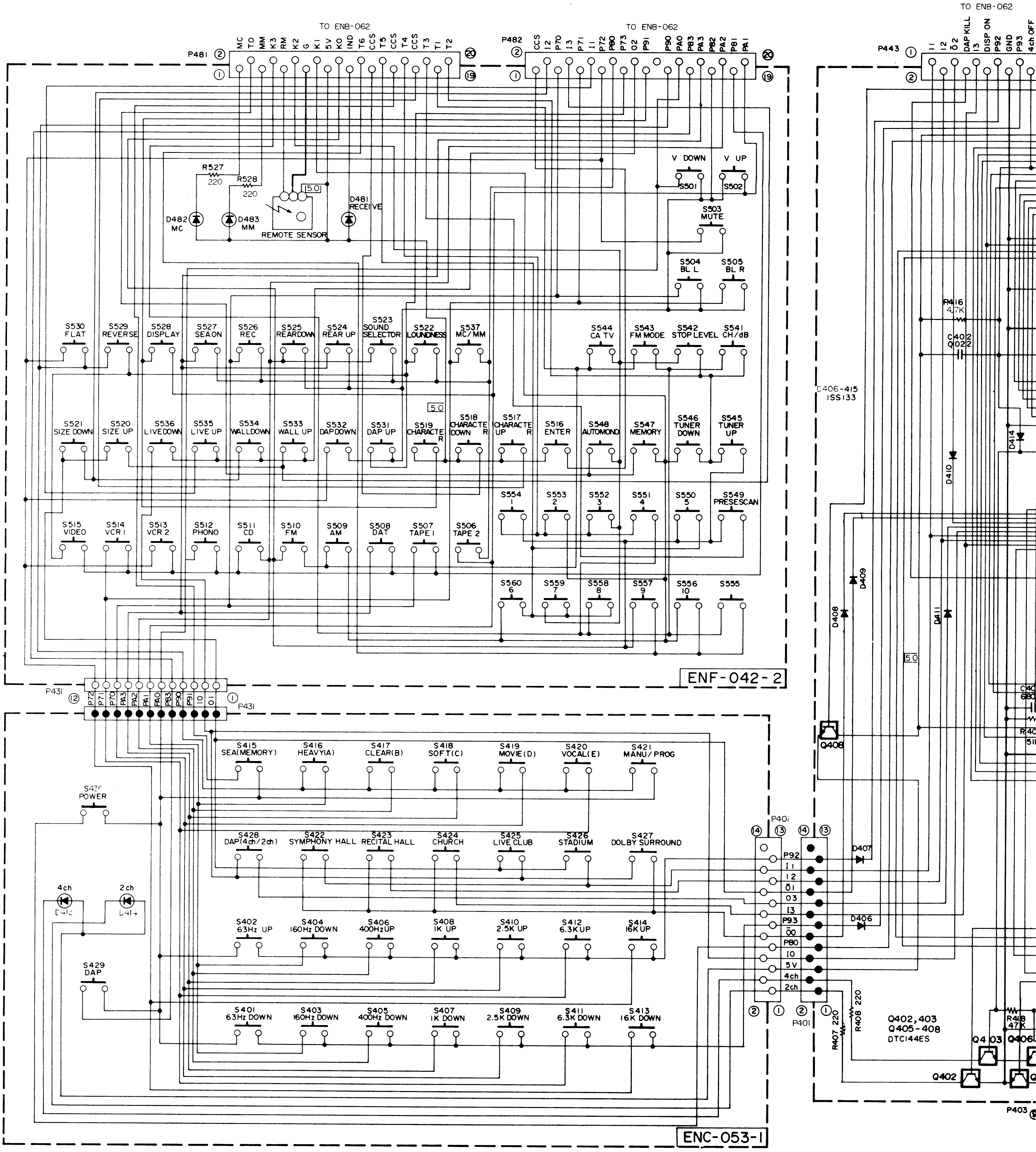
※	J,C,U,P,PG	E,A,BS,G.
R590	15 UNF C	15 UNF. F

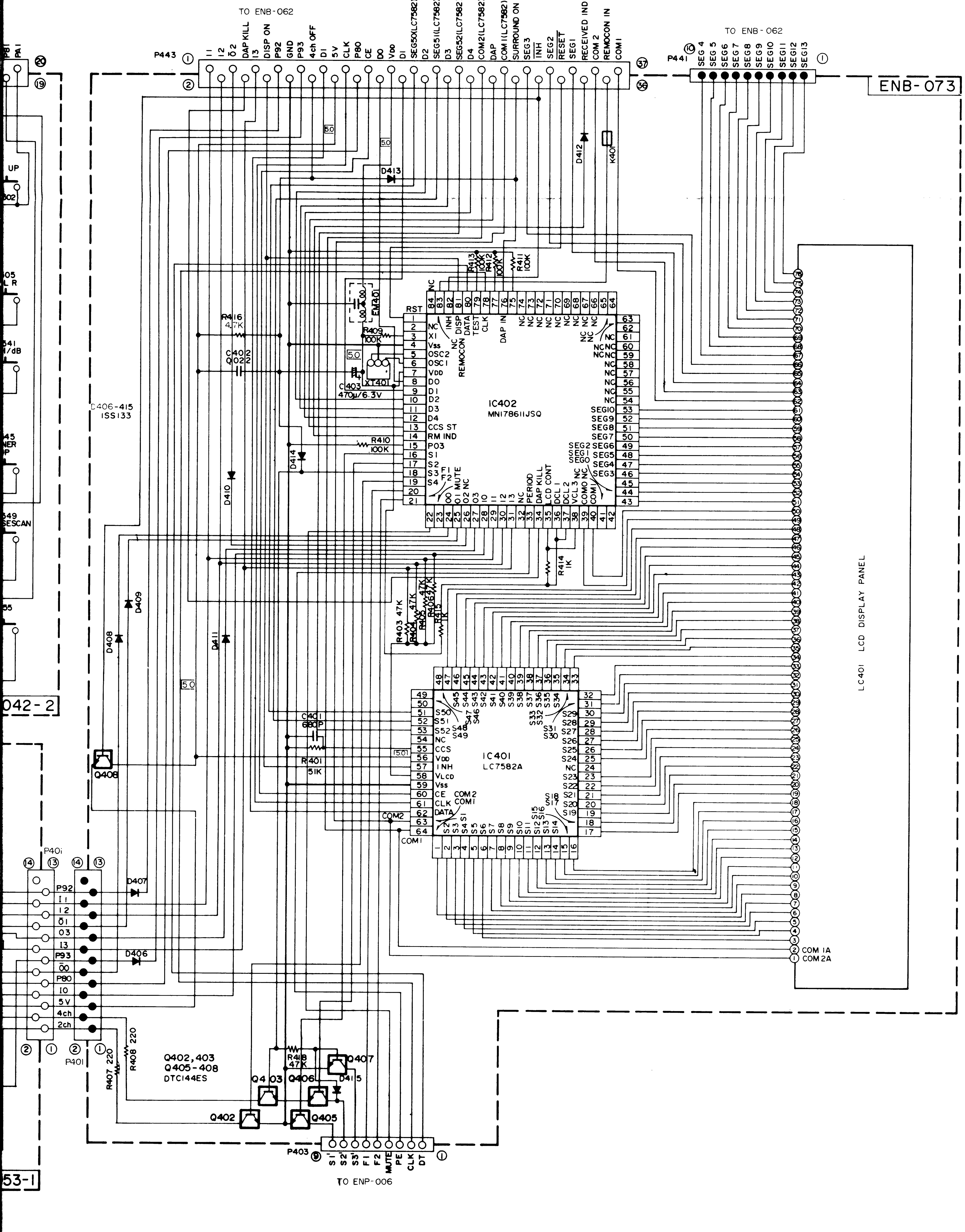
(3) Logic Section


ENB-062
LC421 LCD DISPLAY PANEL
IC421
TC9306F-034
IC462
LC7584-8701
TO ENC-050-1
P441
AD13
AD12
AD11
AD10
AD9
AD8
AD7
AD6
AD5
AD4
TEST
K3
K2
P24
REF
XT421
C421 470/6.3
C422 1.5ML
Q421, 422 2SC458(C,D)
Q421
Q422
Q423 DTC144
C476 180P
R426 22K
R427 10K
R425 47K
R428 10K
R429 470
R476 36K
R480 220K
C478 1/50
R479 220K
C477 1/50
IC491 (P,Q) MN1280
R491 1K
P492
P491
ENC-057
D431
D430
D432
D428
R421 2.2K
D428, 430, 431, D432 1SS133
R423 3.3K
R422 2.2K
R424 10K
C492 2.2/50
Q491 DTC114
D491 1SS133
C462 0.022
D477 1SS133
D478 1SS133
R477 2.2K
R478 2.2K
R472 1.5M
R471 1.5M
Q481, 482 2SC458(C,D)
R484 10K
R483 100
C442 1.5ML
C441 470/6.3
EM441
TEST
R445 1K
R482 22K
R481 47K
Q481
Q482
IC441
MN1758IJSM
XT441
VDD
INH-IN
RM-IN
POO
RM-OUT
DCS-IN
DCS-OUT
SEA-DATA
SEA-CLK
CE-DISP
CCS.REQ
VIDEO1
VIDEO2
SURROUND
TU MUTE
SURR-1
SURR-2
MM
MC
DL1
DL2
DL3
PH MUTE
STB-1
STB-2
STB-3
POWER
DISP ON
RST OUT
OSC1
OSC2
VSS
X1
RESET IN
DATA
INH-IN
CLK
DISP-DATA
TEST-IN
DISP-CLK
BUSY-IN
P80
PA3
PA2
PA1
PA0
P93
P92
P91
P90
P83
P82
P81
P80
P73
P72
P71
P70
R456 100K
R485 47K
R448 100K
R492 47K
R458 100K
D446 1SS133
R457 100K
R444 10K
C450 1.5ML
D454 1SS133
P442
RESET
DCSG
SEADI
DL1
CK
DL2
DI
DL3
CK
SR2
MC/MM
SRI
PH MUTE
V2
STB3
V1
STB2
DCS
STB1
CE
AM
DI
CK
DO
ST
TUNED
MUTE
MW
ENE-046-4
TO ENA-071
P554
ST
MUTE
MW
TUNED
DO
CK
DI
CE
R441 100K
TO ENF-042
P313
R
L
G
G
MUTE
STB2
MC/MM
STB1
SEACK
DI
SEA DI
CLK
TO ENH-100-1
P556
R
G
L
TO ENA-071
P553
TU L
GND
TU R
+5V
CATV
+15V
+27V
C445 1.5ML
FW855
GND
TU+5V
TU+15V
+27V
-15V
+15V
+12V
TO ENH-100-2
P550
TU+15V
TU+5V
CATV
-15V
+15V
+12V
TO ENE-046-1
P552
SR2
SRI
DL3
DL2
DL1
TO ENP-005
P549
RESET
DCS
V2
V1
DCSG
TO ENE-046-1
P555
R
G
L
TO ENE-046-2
P443
COM1
RM IN
COM2
RECEIVE IND
AD1
RST
AD2
INH
AD3
SURROUND ON
COM1
DAP REQ
COM2
D4
SEG 52
D3
SEG 51
D2
SEG 50
D1
VDD
DO
DISP-CE
PBO
DISP-CLK
5V
DISP-DATA
4ch OFF
P93
GND
P92
DISP-ON
I3
O2
I2
I1
TO ENC-05

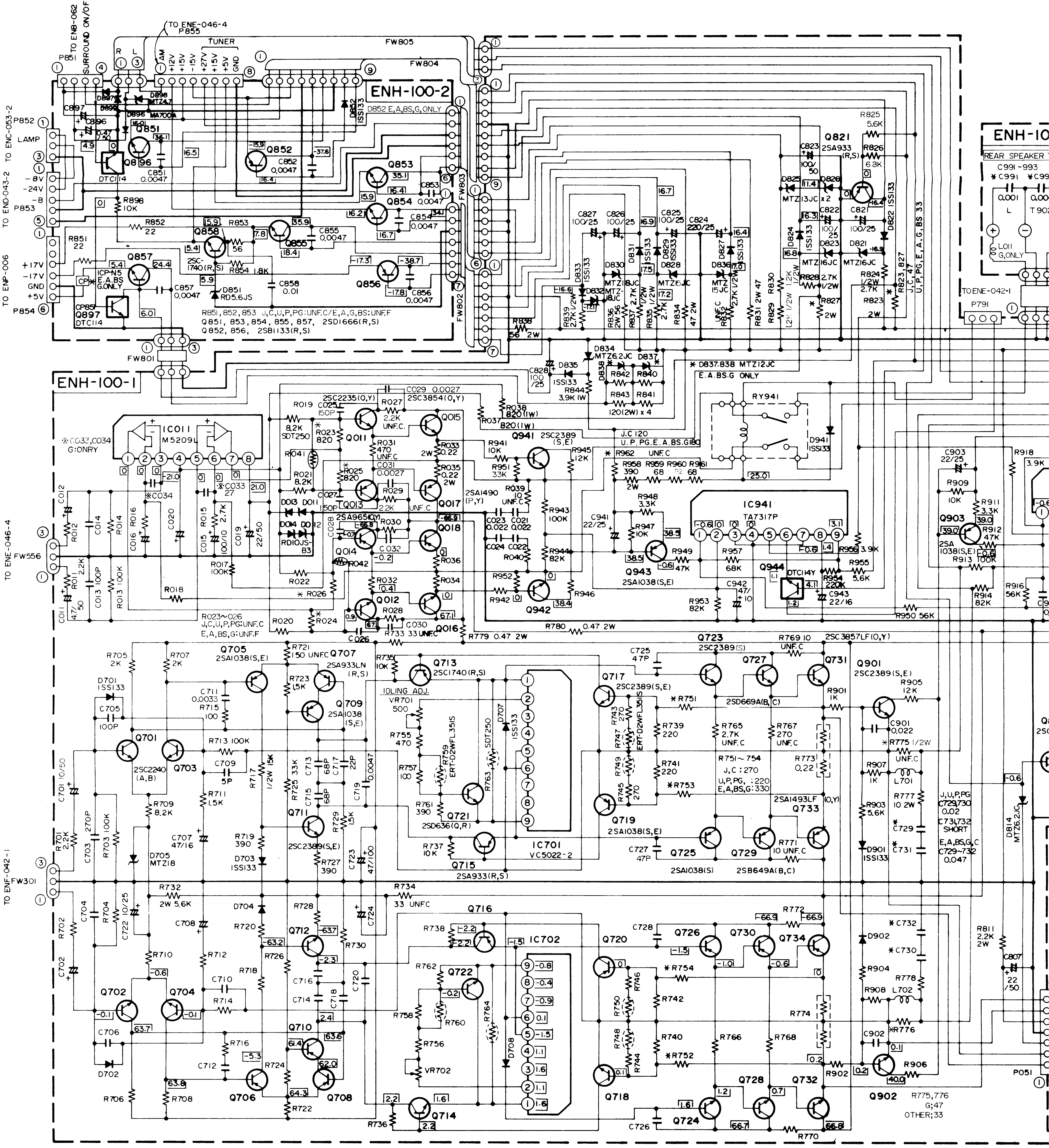

TO ENF-042-2
P482
P481
DISPLAY PANEL
IC462
LC7584-8701
IC441
MN1758IJSM
XT441
IC461
MN1758IJSP
XT461
IC442
DT5C144E
EM441
EM461
TEST
Q481
Q482
D477
ISS133
D478
ISS133
D441~445
ISS133
D421~427
ISS133
D446
ISS133
D455
ISS133
D456
ISS133
R433~440
47K
R477 2.2K
R478 2.2K
R472 1.5M
R471 1.5M
C462 0.022
C441 470/6.3
C442 1.5ML
R484
R483 100
R445 1K
R456 100K
R448 100K
R492 47K
R485 47K
R458 100K
R457 100K
R475 1K
R464 100K
C461 470/16.3
C463 1.5ML
R444 10K
R463 47K
R462 47K
R452 10K
R449 10K
R454 220
RA471 100Kx4
FW862
INH
BACK UP 5V
5V
GND
TO END-043-1
FW851
TO ENH-100-2
5V OFF
RELAY ON/OFF
L
R
TO ENC-050-1
AD1
RST
AD2
INH
AD3
SURROUND ON
COM 1
DAP REQ
COM 2
D4
SEG 52
D3
SEG 51
D2
SEG 50
D1
VDD
D0
DISP-CE
P80
DISP-CLK
5V
DISP-DATA
4ch OFF
P93
GND
P92
DISP-ON
I3
O2
I2
I1
CCS
I2
P70
I3
P71
I1
P72
P80
P73
O2
P91
P90
PA0
P83
PA3
P82
PA2
P81
PA1
MC LED
TO
MM LED
K3
RM
K2
G
K1
5V
K0
IND
T6
CCS (KEY)
T5
CCS (KEY)
T4
CCS (ENTER)
T3
T1
T2

(4) LCD & Control Switch Section


TO ENB-062
P481
MC TO MM K3 RM K2 G K1 5V KO IND T6 CCS T5 CCS T4 CCS T3 T1 T2
P482
CCS I2 P70 I3 P71 I1 P72 P80 P73 O2 P91 P90 PA0 P83 PA3 P82 PA2 P81 PA1
P443
I1 I2 Ō2 DAP KILL I3 DISP ON P92 GND P93 4ch OFF
R527 220
R528 220
D482 MC
D483 MM
REMOTE SENSOR
D481 RECEIVE
5.0
V DOWN
V UP
S501
S502
S503 MUTE
S504 BL L
S505 BL R
S530 FLAT
S529 REVERSE
S528 DISPLAY
S527 SEA ON
S526 REC
S525 REAR DOWN
S524 REAR UP
S523 SOUND SELECTOR
S522 LOUDNESS
S537 MC/MM
S544 CA TV
S543 FM MODE
S542 STOP LEVEL
S541 CH/dB
S521 SIZE DOWN
S520 SIZE UP
S536 LIVE DOWN
S535 LIVE UP
S534 WALL DOWN
S533 WALL UP
S532 DAP DOWN
S531 DAP UP
S519 CHARACTE R
S518 CHARACTE DOWN R
S517 CHARACTE UP R
S516 ENTER
S548 AUTOMONO
S547 MEMORY
S546 TUNER DOWN
S545 TUNER UP
S554 1
S553 2
S552 3
S551 4
S550 5
S549 PRESESCAN
S515 VIDEO
S514 VCR 1
S513 VCR 2
S512 PHONO
S511 CD
S510 FM
S509 AM
S508 DAT
S507 TAPE 1
S506 TAPE 2
S560 6
S559 7
S558 8
S557 9
S556 10
S555
ENF-042-2
P431
P72 P71 P70 PA3 PA2 PA1 PA0 P83 P90 P91 I0 O1
S415 SEA(MEMORY)
S416 HEAVY(A)
S417 CLEAR(B)
S418 SOFT(C)
S419 MOVIE(D)
S420 VOCAL(E)
S421 MANU/PROG
S430 POWER
S428 DAP(4ch/2ch)
S422 SYMPHONY HALL
S423 RECITAL HALL
S424 CHURCH
S425 LIVE CLUB
S426 STADIUM
S427 DOLBY SURROUND
4ch
2ch
D413
D414
S402 63Hz UP
S404 160Hz DOWN
S406 400Hz UP
S408 1K UP
S410 2.5K UP
S412 6.3K UP
S414 16K UP
S429 DAP
S401 63Hz DOWN
S403 160Hz DOWN
S405 400Hz DOWN
S407 1K DOWN
S409 2.5K DOWN
S411 6.3K DOWN
S413 16K DOWN
ENC-053-1
P401
P92 I1 I2 Ō1 O3 I3 P93 Ō0 P80 I0 5V 4ch 2ch
D407
D406
R407 220
R408 220
Q402,403
Q405-408
DTC144ES
Q402
Q403
Q406
Q408
P403
D406-415 1SS133
R416 4.7K
C402 0.022
D408
D409
D410
D411
D414
R418 47K
5.0


TO ENB-062
P443
I1
I2
Ō2
DAP KILL
I3
DISP ON
P92
GND
P93
4ch OFF
D1
5V
CLK
P80
CE
D0
VDD
DI
SEG50(LC7582)
D2
SEG51(LC7582)
D3
SEG52(LC7582)
D4
COM2(LC7582)
DAP
COM1(LC7582)
SURROUND ON
SEG3
INH
SEG2
RESET
SEG1
RECEIVED IND
COM 2
REMOCON IN
COM 1
P441
SEG 4
SEG 5
SEG6
SEG 7
SEG 8
SEG 9
SEG10
SEG11
SEG12
SEG13
ENB-073
D413
D412
K401
R413 100K
R412 100K
R411 100K
EM401
R416 4.7K
R409 100K
C402 0.022
XT401
C403 470μ/6.3V
IC402
MN17861JSQ
R410 100K
D414
D410
D406-415
1SS133
R414 1K
R403 47K
R404 47K
R405 47K
R406 47K
R415 1K
D409
D408
D411
C401 680P
R401 51K
IC401
LC7582A
COM2
COM1
Q408
P401
P92
I1
I2
Ō1
O3
I3
P93
Ō0
P80
I0
5V
4ch
2ch
D407
D406
R407 220
R408 220
Q402,403
Q405-408
DTC144ES
R418 47K
Q403
Q406
Q407
D415
Q402
Q405
P403
S1
S2
S3
F1
F2
MUTE
PE
CLK
DT
TO ENP-006
LC401 LCD DISPLAY PANEL
COM 1A
COM 2A
042-2
53-1
UP
L R
/dB
NER
SESCAN

(5) Main Amplifier Section


ENH-100-2
ENH-100-1
TO ENE-046-4 P855
TO ENB-062 SURROUND ON/OFF
TUNER
AM
+12V
+15V
-15V
+27V
+15V
+5V
GND
FW805
FW804
FW803
FW802
FW801
FW556
FW301
P851
P852
P853
P854
P791
P051
TO ENC-053-2
LAMP
TO END-043-2
-8V
-24V
-B
TO ENP-006
+17V
-17V
GND
+5V
TO ENE-046-4
TO ENF-042-1
TO ENE-042-1
Q851
Q852
Q853
Q854
Q855
Q856
Q857
Q858
Q896
Q897
DTC114
D852 E,A,BS,G ONLY
D852 1SS133
D896 MA700A
D898 MTZ4.7
D851 RD5.6JS
ICP-N5 E.A.BS G.ONLY
CP851
R851, 852, 853 J,C,U,P,PG:UNF.C/E,A,G,BS:UNF.F
Q851, 853, 854, 855, 857, 2SD1666(R,S)
Q852, 856, 2SB1133(R,S)
2SC1740(R,S)
R852 22
R853
R854 1.8K
R898 10K
C851 0.0047
C852 0.0047
C853 0.0047
C854 0.0047
C855 0.0047
C856 0.0047
C857 0.0047
C858 0.01
Q821 2SA933 (R,S)
R825 5.6K
R826 6.3K
C821 100/25
C822 100/25
C823 100V 50
C824 220/25
C825 100/25
C826 100/25
C827 100/25
C828 100/25
D821 MTZ16JC
D822 1SS133
D823 MTZ16JC
D824 1SS133
D825 MTZ13JC x2
D826
D827 1SS133
D828 MTZ15JC
D829 1SS133
D830 MTZ18JC
D831 1SS133
D832 MTZ18JC
D833 1SS133
D834 MTZ6.2JC
D835 1SS133
D836 MTZ15JC
D837
D838
* D837.838 MTZ12JC E.A.BS.G ONLY
R823, 827 J,C,4,7 U,P,PG,E,A,G,BS 33
R824 1/2W 2.7K
R828 2.7K 1/2W
R829 1.2K 1/2W
R830 1.2K 1/2W
R831 2W 47
R834 47 2W
R835 1/2W 2.7K
R836 2W 56
R837 2.7K
R838 56 2W
R839 2.7K 1/2W
R840
R841
R842
R843
R844 3.9K 1W
120(2W) x 4
RY941
D941 1SS133
IC011 M5209L
IC941 TA7317P
*C032,C034 G:ONRY
Q011
Q012
Q013
Q014
Q015
Q016
Q017
Q018
2SC2235(O,Y)
2SC3854(O,Y)
2SA965(O,Y)
2SA1490 (P,Y)
R019 8.2K
R023 820
R025 820
R027 2.2K
R031 470 UNF.C
R033 0.22 2W
R035 0.22 2W
R037 820(1W)
R038 820(1W)
R029 2.2K
R028 2.2K
R021 8.2K
C029 0.0027
C031 0.0027
C025 150P
C027 150P
D013
D011
D014
D012 RD10JS-B3
R023~026 J,C,U,P,PG:UNF.C E,A,BS,G:UNF.F
R779 0.47 2W
R780 0.47 2W
Q941 2SC2389 (S,E)
Q942
Q943 2SA1038(S,E)
Q944 DTC114Y
R941 10K
R943 100K
R944 82K
R945 12K
R947 10K
R948 3.3K
R949 47K
R951 33K
R953 82K
R954 220K
R955 5.6K
R956 3.9K
R957 68K
R958 390 2W
R959 68
R960 68
R961
R962 UNF.C
J.C 120 U.P.PG.E.A.BS.G180
C941 22/25
C942 47/10
C943 22/16
R950 56K
ENH-10
REAR SPEAKER
C991-993
*C991 *C99
0.001
L011 G,ONLY
T902
Q901 2SC2389(S,E)
Q902
Q903 2SA1038(S,E)
C903 22/25
R905 12K
R909 10K
R911 3.3K
R912 47K
R913 100K
R914 82K
R916 56K
R918 3.9K
C901 0.022
C902
R775 1/2W UNF.C
R777 10 2W
L701
L702
R907 1K
R903 5.6K
R904
R906
R908
D901 1SS133
D902
*C729
*C731
*C730
*C732
J,U,P,PG C729,730 0.02 C731,732 SHORT E,A,BS,G,C C729~732 0.047
D814 MTZ6.2JC
R811 2.2K 2W
C807 22/50
R775,776 G;47 OTHER;33
IC701 VC5022-2
IC702
IDLING ADJ. VR701 500
VR702
Q701
Q702
Q703
Q704
Q705 2SA1038(S,E)
Q706
Q707 2SA933LN (R,S)
Q708
Q709 2SA1038 (S,E)
Q710
Q711
Q712
Q713 2SC1740(R,S)
Q714
Q715 2SA933(R,S)
Q716
Q717 2SC2389(S,E)
Q718
Q719 2SA1038(S,E)
Q720
Q721 2SD636(Q,R)
Q722
Q723 2SC2389(S)
Q724
Q725 2SA1038(S)
Q726
Q727 2SD669A(B,C)
Q728
Q729 2SB649A(B,C)
Q730
Q731 2SC3857LF(O,Y)
Q732
Q733 2SA1493LF (O,Y)
Q734
2SC2240 (A,B)
2SC2389(S,E)
D701 1SS133
D703 1SS133
D705 MTZ18
D707 1SS133
R701 2.2K
R703 100K
R705 2K
R707 2K
R709 8.2K
R711 1.5K
R713 100K
R715 100
R717 1/2W 15K
R719 390
R721 150 UNF.C
R723 1.5K
R725 33K
R727 390
R729 1.5K
R732 2W 5.6K
R733 33 UNF.C
R734 33 UNF.C
R735 10K
R737 10K
R739 220
R741 220
R743 270
R745 270
R747 270
R749 ERT-D2WFL351S
R751~754 J,C:270 U,P,PG,:220 E,A,BS,G:330
R755 470
R757 100
R759 ERT-D2WFL351S
R761 390
R763 SDT250
R765 2.7K UNF.C
R767 270 UNF.C
R769 10 UNF.C
R771 10 UNF.C
R773 0.22
C701 10/50
C703 270P
C705 100P
C707 47/16
C709 5P
C711 0.0033
C713 68P
C715 68P
C717 22P
C719 0.0047
C722 10/25
C723 47/100
C725 47P
C727 47P
SDT250
R738
R762
R758
R760
R756
R764
D708
R736
R770
R772
R774
R766
R768
R740
R742
R744
R746
R748
R750
*R752
*R754
R702
R704
R706
R708
R710
R712
R714
R716
R718
R720
R722
R724
R726
R728
R730
C702
C704
C706
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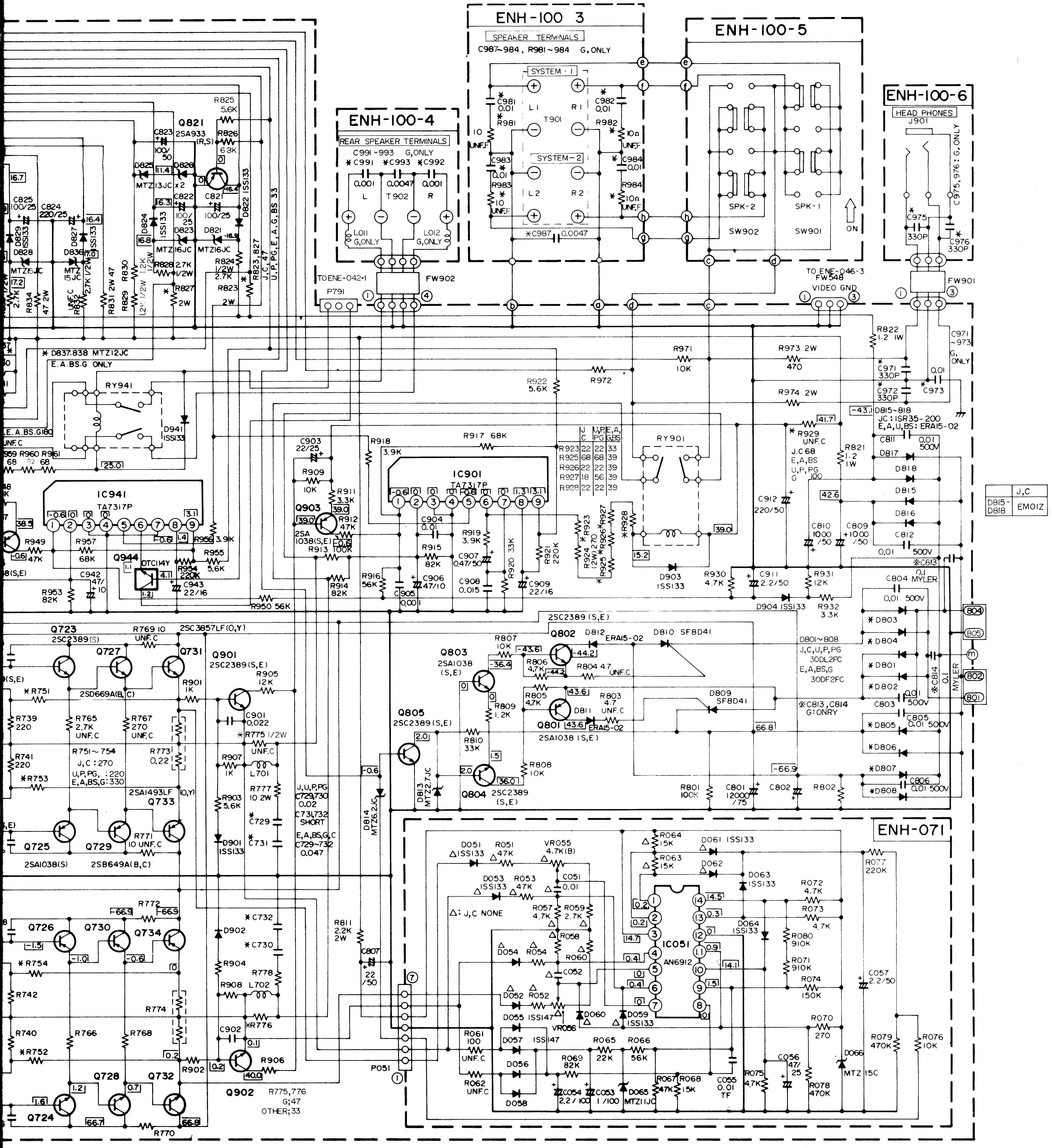
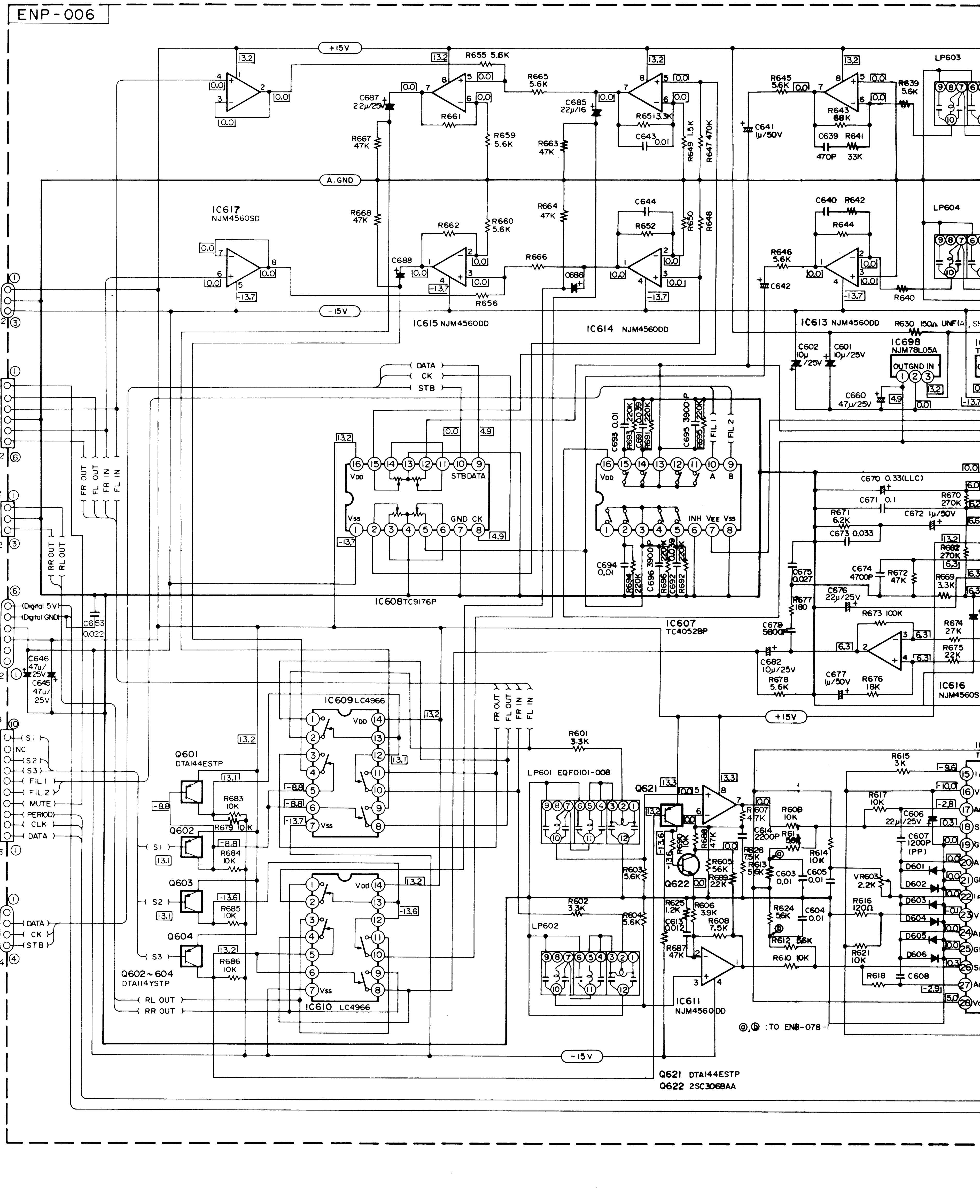
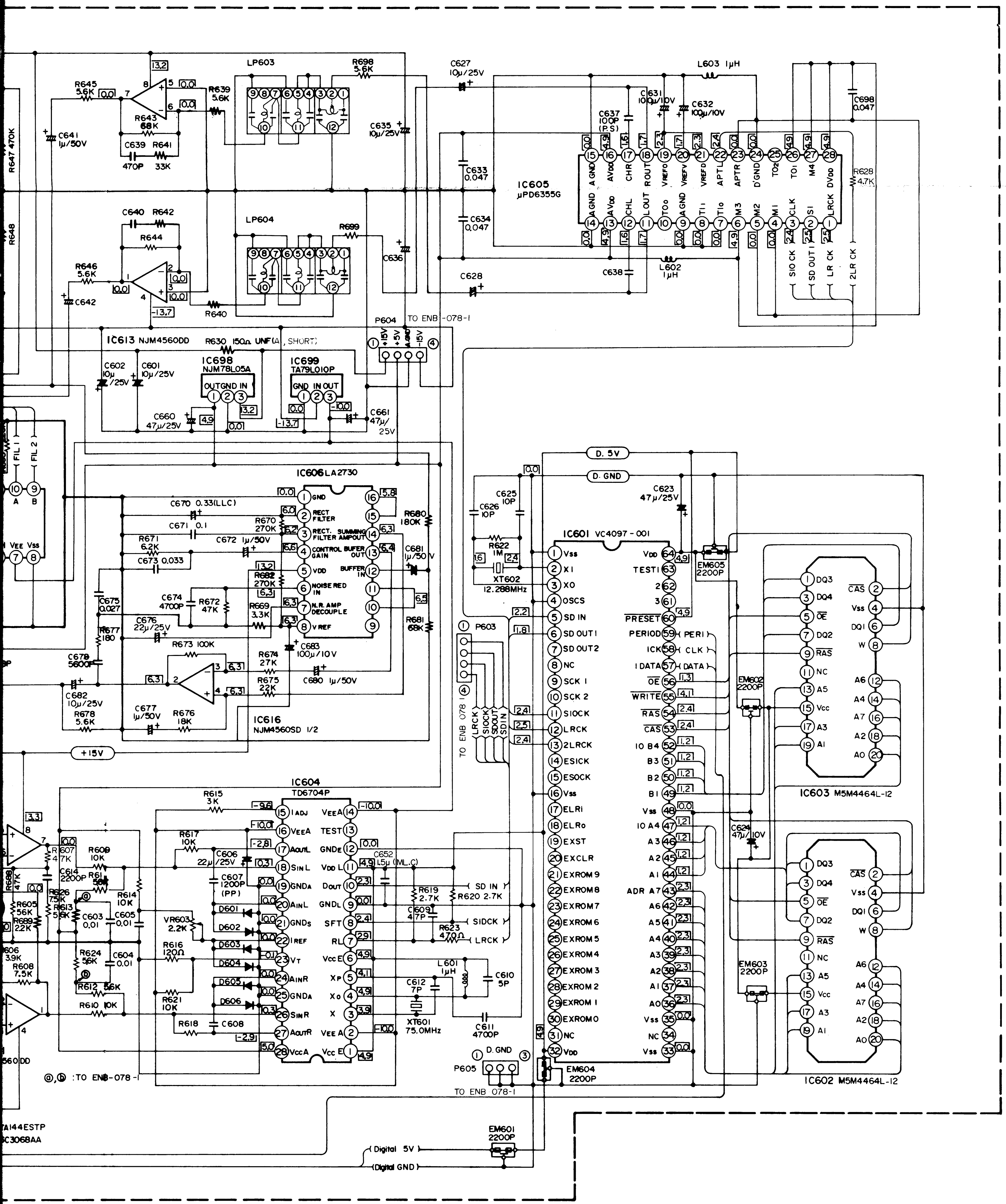
C728
D702
D704
ENH-100-1


ENH-100 3
SPEAKER TERMINALS
C987~984, R981~984 G,ONLY
SYSTEM-1
SYSTEM-2
L1
R1
L2
R2
T901
C981 0.01
C982 0.01
C983 0.01
C984 0.01
R981
R982
R983
R984
10Ω UNF.F
*C987 0.0047
ENH-100-5
SPK-2
SPK-1
SW902
SW901
ON
ENH-100-4
REAR SPEAKER TERMINALS
C991~993 G,ONLY
*C991 *C993 *C992
0.001 0.001 0.001
L T902 R
L011 G,ONLY
L012 G,ONLY
FW902
TO ENE-042-1
P791
ENH-100-6
HEAD PHONES
J901
C975,976: G,ONLY
C975 330P
C976 330P
FW901
TO ENE-046-3 FW548
VIDEO GND
R822 1.2 1W
C971~973 G,ONLY
C971 330P
C972 330P
C973 0.01
R971 10K
R972
R973 2W 470
R974 2W
R922 5.6K
RY941
D941 1SS133
RY901
Q821 2SA933 (R,S)
R825 5.6K
R826 6.8K
C823 100/50
C822 100/25
C821 100/25
D822 1SS133
D825 D826 MTZ13JC x2
D823 D824 1SS133
D821 MTZ16JC
R824 1/2W 2.7K
R823
R827 2W
R828 2.7K 1/2W
C825 100/25
C824 220/25
D827 D828 D829 D836
MTZ15JC
R834 47 2W
R831 2W 47
R830 R829
*D837.838 MTZ12JC
E.A.BS.G ONLY
R959 R960 R961 68 68
IC941 TA7317P
Q944 DTC114Y
R949 47K
R957 68K
R956 3.9K
R955 5.6K
R954 220K
C942 47/10
C943 22/16
R953 82K
R950 56K
IC901 TA7317P
R917 68K
R918 3.9K
C903 22/25
R909 10K
R911 3.3K
R912 47K
R913 100K
Q903 2SA1038(S,E)
C904 0.01
R919 3.9K
R915 82K
C907 0.47/50
R920 33K
R921 220K
R916 56K
R914 82K
C905 0.001
C906 47/10
C908 0.015
C909 22/16
R923 R924 R925 R926 R927 R928
J,C | U,P,PG | E,A,GBS
R923 22 22 33
R925 68 68 39
R926 22 22 39
R927 18 56 39
R928 22 22 39
R924 270 (2W)
D903 1SS133
R930 4.7K
C911 2.2/50
R931 12K
R932 3.3K
D904 1SS133
C912 220/50
R929 UNF.C
J.C 68 E,A,BS U,P,PG G 100
R821 1.2 1W
D815~818 JC: 1SR35-200 E,A,U,BS: ERA15-02
C811 0.01 500V
D817 D818 D815 D816
C810 1000/50
C809 1000/50
C812 0.01 500V
*C813 0.1
C804 MYLER 0.01 500V
D815-D818 | J,C | EM01Z
Q723 2SC2389(S)
Q727
Q731 2SC3857LF(O,Y)
R769 10 UNF.C
2SD669A(B,C)
R751
R739 220
R765 2.7K UNF.C
R767 270 UNF.C
R741 220
R751~754 J,C: 270 U,P,PG: 220 E,A,BS,G: 330
R773 0.22
R753
2SA1493LF (O,Y)
Q733
Q725 Q729
R771 10 UNF.C
2SA1038(S) 2SB649A(B,C)
Q901 2SC2389(S,E)
R905 12K
R901 1K
C901 0.022
R775 1/2W UNF.C
R907 1K
L701
R777 10 2W
R903 5.6K
C729 C731
D901 1SS133
J,U,P,PG C729,730 0.02 C731,732 SHORT E,A,BS,G,C C729~732 0.047
Q726 Q730 Q734
R772
R754 R742 R740 R752
R766 R768
R774
D902
C732 C730
R904
R908 L702
R778
R776
C902
R906
R902
Q902
R775,776 G;47 OTHER;33
Q724 Q728 Q732
R770
R811 2.2K 2W
C807 22/50
D814 MTZ6.2JC
D813 MTZ2.7JC
Q805 2SC2389(S,E)
Q803 2SA1038 (S,E)
R807 10K
R806 4.7K
R809 1.2K
R810 33K
Q804 2SC2389 (S,E)
R808 10K
Q802 2SC2389 (S,E)
D812 ERA15-02
D810 SF8D41
R804 4.7 UNF.C
R805 4.7K
R803 4.7 UNF.C
D811 ERA15-02
Q801 2SA1038 (S,E)
D809 SF8D41
R801 100K
C801 12000/75
C802
R802
D801~808 J,C,U,P,PG 30DL2FC E,A,BS,G 30DF2FC
*C813,C814 G: ONRY
D803 D804 D801 D802 D805 D806 D807 D808
C803 0.01 500V
C805 0.01 500V
C806 0.01 500V
C814 0.1 MYLER
ENH-071
P051
D051 1SS133
R051 47K
VR055 4.7K(B)
D053 1SS133
R053 47K
C051 0.01
Δ: J,C NONE
R057 4.7K
R059 2.7K
R058
D054 R054
R060
C052
D052 R052
D055 1SS147
VR056
D060
D059 1SS133
R064 15K
R063 15K
D061 1SS133
D062
D063 1SS133
IC051 AN6912
D064 1SS133
R072 4.7K
R073 4.7K
R080 910K
R071 910K
R074 150K
R077 220K
C057 2.2/50
R070 270
R061 100 UNF.C
R062 UNF.C
D057 1SS147
D056 D058
R065 22K
R066 56K
R069 82K
C054 2.2/100
C053 1/100
D065 MTZ11JC
R067 47K
R068 15K
C055 0.01 TF
R075 4.7K
C056 47/25
R078 470K
D066 MTZ15C
R079 470K
R076 10K

(6) Digital Acoustic Processor Section


ENP-006
+15V
A.GND
-15V
IC617
NJM4560SD
IC615 NJM4560DD
IC614 NJM4560DD
IC613 NJM4560DD
IC698
NJM78L05A
OUT GND IN
LP603
LP604
R655 5.6K
R665 5.6K
R661
R659 5.6K
R667 47K
R668 47K
R662
R660 5.6K
R656
R666
R663 47K
R664 47K
R651 3.3K
R652
R649 1.5K
R647 470K
R650
R648
R645 5.6K
R643 68K
R639 5.6K
R641 33K
R646 5.6K
R644
R642
R640
R630 150Ω UNF
C687 22µ/25V
C688
C685 22µ/16
C686
C643 0.01
C644
C641 1µ/50V
C642
C639 470P
C640
C602 10µ/25V
C601 10µ/25V
C660 47µ/25V
FW601
+15V
GND
-15V
TO ENB-078-2
P601
MUTE
FL OUT
FL IN
GND
FR IN
FR OUT
TO ENB 078 2
P602
RL OUT
GND
RR OUT
TO ENB 078 2
FW854
Digital 5V
Digital GND
-15V
+15V
NC
NC
TO ENH-100-2
C653 0.022
C646 47µ/25V
C645 47µ/25V
BC403
S1
NC
S2
S3
FIL1
FIL2
MUTE
PERIOD
CLK
DATA
TO ENB-073
FW551
NC
DATA
CK
STB
TO ENE-046-4
DATA
CK
STB
FR OUT
FL OUT
FR IN
FL IN
RR OUT
RL OUT
IC608 TC9176P
VDD
VSS
STB DATA
GND CK
IC607
TC4052BP
INH VEE VSS
A B
FIL 1
FIL 2
C693 0.01
C695 3900P
C694 0.01
C696 3900P
R693 220K
R691 220K
R694 220K
R696 220K
R692 220K
IC609 LC4966
IC610 LC4966
Q601
DTA144ESTP
Q602
Q603
Q604
Q602~604
DTA114YSTP
R683 10K
R679 10K
R684 10K
R685 10K
R686 10K
RL OUT
RR OUT
R601 3.3K
R602 3.3K
R603 5.6K
R604 5.6K
LP601 EQF0101-008
LP602
Q621
Q622
R607 47K
R690 10K
R688 47K
R605 56K
R689 22K
R625 1.2K
R606 3.9K
R608 7.5K
R687 47K
C613 0.012
C614 2200P
R626 7.5K
R613 5.6K
R609 10K
R611 50K
R614 10K
C603 0.01
C605 0.01
R624 56K
C604 0.01
R612 56K
R610 10K
IC611
NJM4560DD
Ⓐ,Ⓑ : TO ENB-078-1
Q621 DTA144ESTP
Q622 2SC3068AA
C670 0.33(LLC)
C671 0.1
R670 270K
R671 6.2K
C672 1µ/50V
C673 0.033
C674 4700P
R672 47K
R682 270K
R669 3.3K
C675 0.027
R677 180
C676 22µ/25V
R673 100K
C678 5600P
R674 27K
R675 22K
C682 10µ/25V
R678 5.6K
C677 1µ/50V
R676 18K
IC616
NJM4560S
R615 3K
R617 10K
C606 22µ/25V
C607 1200P (PP)
D601
D602
D603
D604
D605
D606
VR603 2.2K
R616 120Ω
R621 10K
R618
C608


IC605 μPD6355G
L603 1μH
C698 0.047
R628 4.7K
C627 10μ/25V
C631 100μ/10V
C632 100μ/10V
C637 100P (P.S)
C633 0.047
C634 0.047
C635 10μ/25V
C636
C638
L602 1μH
C628
SIO CK
SD OUT 1
LR CK
2LR CK
LP603
LP604
R698 5.6K
R699
R645 5.6K
R643 68K
R639 5.6K
C641 1μ/50V
C639 470P
R641 33K
R647 470K
R648
C640
R642
R644
R646 5.6K
C642
R640
P604
TO ENB-078-1
IC613 NJM4560DD
R630 150Ω UNF(A, SHORT)
IC698 NJM78L05A
IC699 TA79L010P
C602 10μ/25V
C601 10μ/25V
C660 47μ/25V
C661 47μ/25V
IC606 LA2730
C670 0.33(LLC)
C671 0.1
R670 270K
R671 6.2K
C672 1μ/50V
C673 0.033
R682 270K
R672 47K
C674 4700P
C675 0.027
R677 180
C676 22μ/25V
R669 3.3K
C683 100μ/10V
R680 180K
R681 68K
C681 1μ/50V
R673 100K
R674 27K
R675 22K
C680 1μ/50V
C678 5600P
C682 10μ/25V
R678 5.6K
C677 1μ/50V
R676 18K
IC616 NJM4560SD 1/2
+15V
IC604 TD6704P
R615 3K
R617 10K
C606 22μ/25V
C607 1200P (PP)
C652 L5μ (ML.C)
R619 2.7K
R620 2.7K
C609 47P
R623 470Ω
SD IN
SIDCK
LRCK
L601 1μH
C610 5P
C612 7P
XT601 75.0MHz
C611 4700P
VR603 2.2K
D601
D602
D603
D604
D605
D606
R616 120Ω
R621 10K
R618
C608
R609 10K
R614 10K
R610 10K
C614 2200P
C603 0.01
C605 0.01
C604 0.01
R624 56K
R612 5.6K
R605 56K
R626 75K
R613 5.6K
R689 22K
R606 3.9K
R608 7.5K
R607 47K
R688 47K
560DD
TA144ESTP
C3068AA
ⓐ,ⓑ :TO ENB-078-1
IC601 VC4097-001
D. 5V
D. GND
C623 47μ/25V
C625 10P
C626 10P
R622 1M
XT602 12.288MHz
EM605 2200P
EM602 2200P
EM603 2200P
EM604 2200P
EM601 2200P
C624 47μ/10V
P603
TO ENB 078-1
LRCK
SIOCK
SDOUT
SDIN
P605
D.GND
TO ENB 078-1
Digital 5V
Digital GND
IC603 M5M4464L-12
IC602 M5M4464L-12
DQ3
DQ4
OE
DQ2
RAS
NC
A5
Vcc
A3
A1
CAS
Vss
DQ1
W
A6
A4
A7
A2
A0
Vss
X1
X0
OSCS
SD IN
SD OUT1
SD OUT2
SCK 1
SCK 2
SIOCK
LRCK
2LRCK
ESICK
ESOCK
ELRI
ELRo
EXST
EXCLR
EXROM 9
EXROM 8
EXROM 7
EXROM 6
EXROM 5
EXROM 4
EXROM 3
EXROM 2
EXROM 1
EXROM 0
VDD
TESTI
PRESET
PERIOD
ICK
IDATA
WRITE
IO B4
B3
B2
B1
IO A4
ADR A7
A GND
AVDD
CHR
ROUT
VREFO
VREFV
VREFD
APTL
APTR
D'GND
TO2
TO1
M4
LRCK
DVDD
CHL
LOUT
TOo
TIi
TIo
M3
M2
M1
CLK
SI
GND
RECT FILTER
RECT. SUMMING FILTER AMP OUT
CONTROL GAIN
BUFFER OUT
VDD
BUFFER IN
NOISE RED IN
N.R. AMP DECOUPLE
VREF
IADJ
VEEA
AOUTL
SINL
GNDa
AINL
GNDs
IREF
VT
AINR
GNDA
SINR
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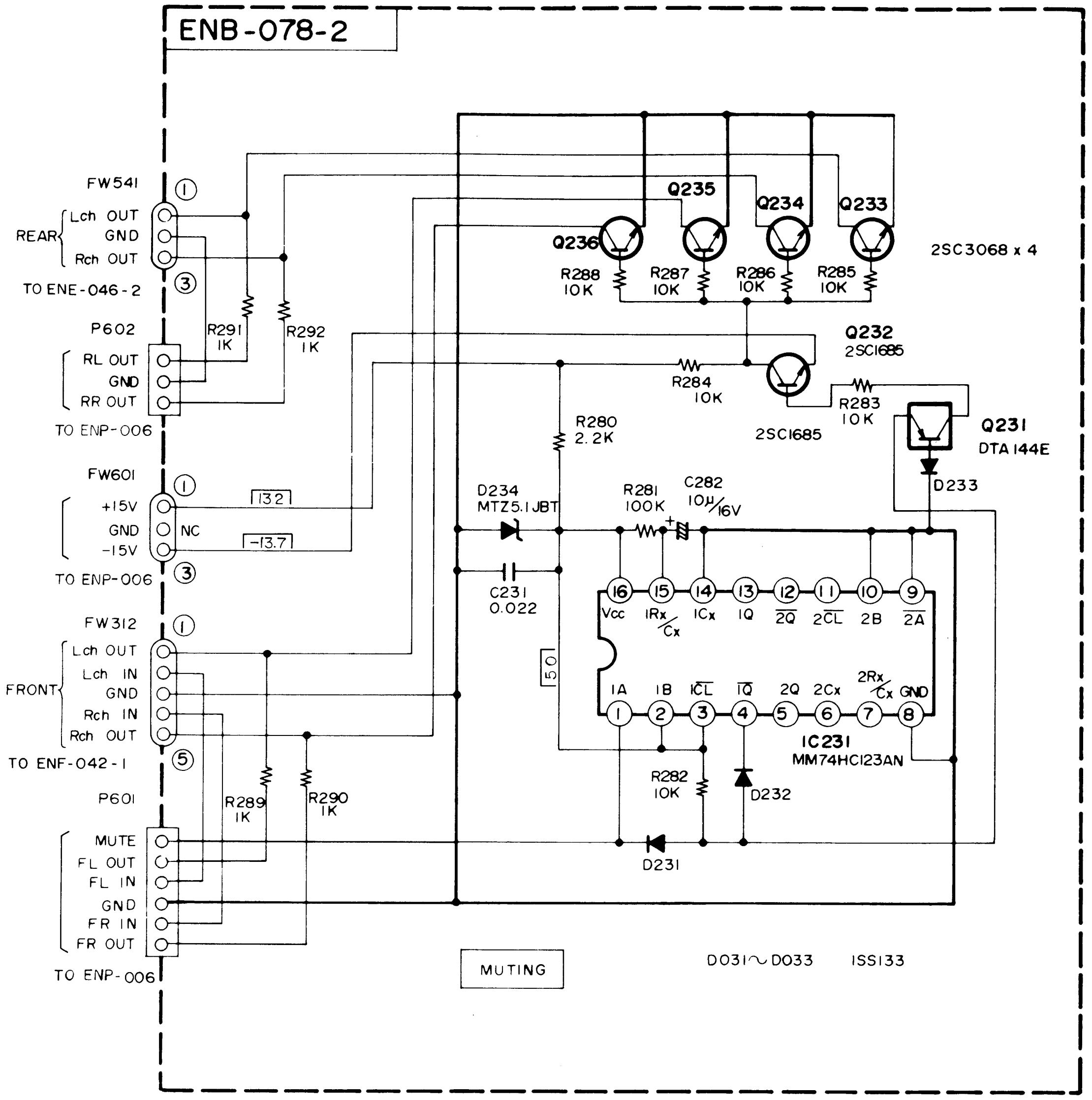
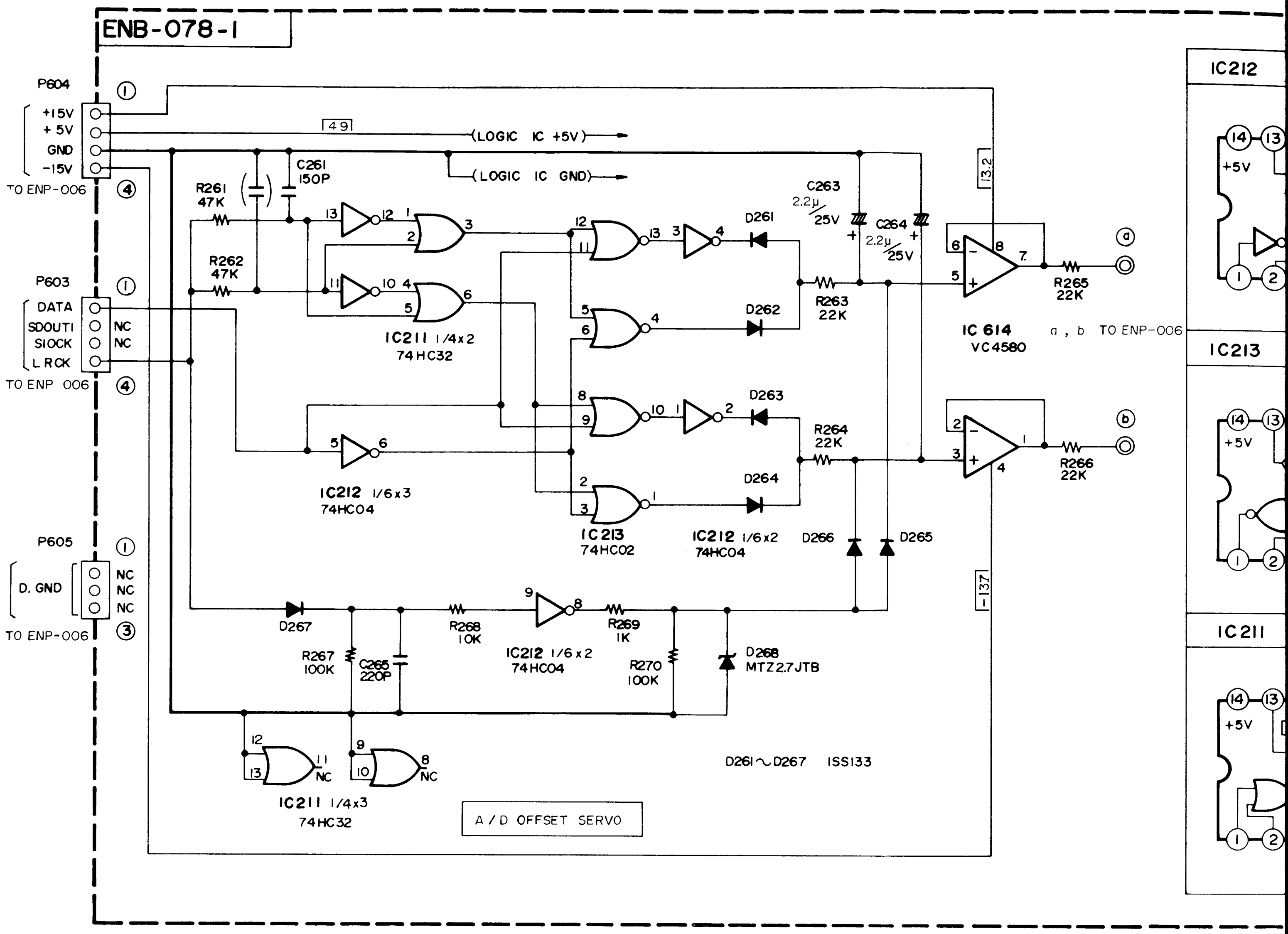
VCCA
VEEA
TEST
GNDE
VDD L
DOUT
GNDL
SFT
RL
VCC E
XP
XO
X
VEE A
VCC E
FIL 1
FIL 2
VEE
Vss

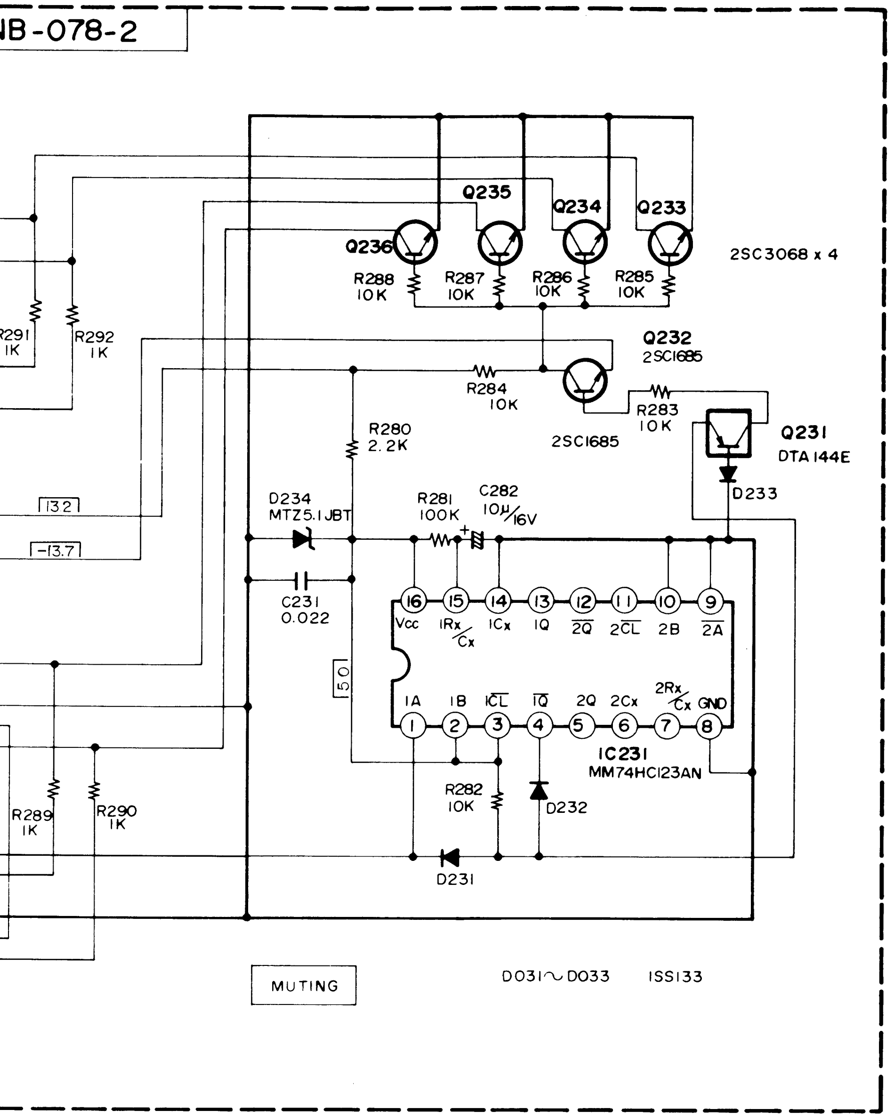
(7) DAP Sub Section



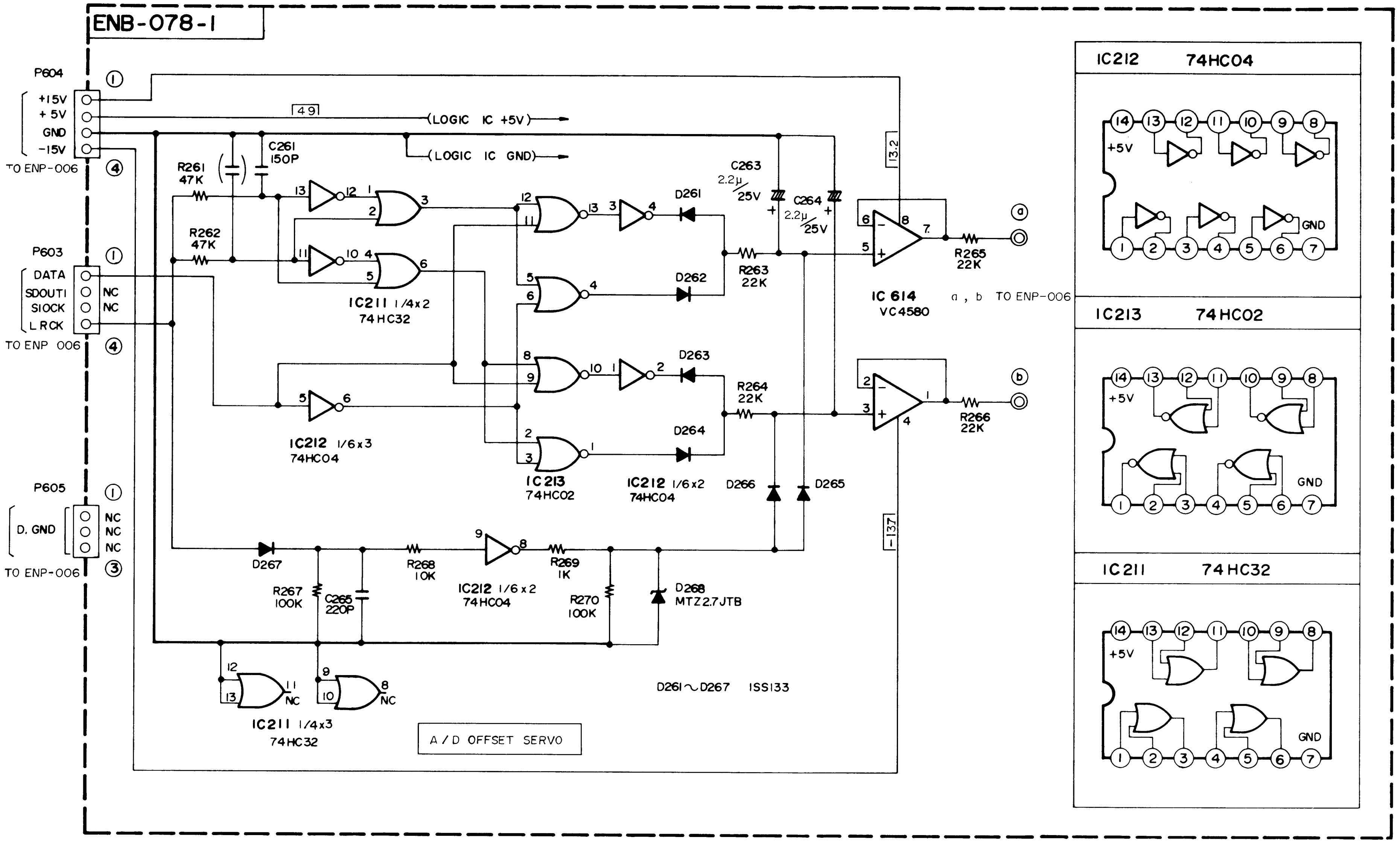
ENB-078-2
FW541
REAR
Lch OUT
GND
Rch OUT
TO ENE-046-2
P602
RL OUT
GND
RR OUT
TO ENP-006
FW601
+15V
GND
-15V
NC
13.2
-13.7
TO ENP-006
FW312
FRONT
Lch OUT
Lch IN
GND
Rch IN
Rch OUT
TO ENF-042-1
P601
MUTE
FL OUT
FL IN
GND
FR IN
FR OUT
TO ENP-006
R291 1K
R292 1K
R289 1K
R290 1K
Q236
Q235
Q234
Q233
2SC3068 x 4
R288 10K
R287 10K
R286 10K
R285 10K
Q232 2SC1685
R284 10K
R283 10K
2SC1685
Q231 DTA144E
D233
R280 2.2K
D234 MTZ5.1JBT
R281 100K
C282 10μ 16V
C231 0.022
5.0
Vcc
1Rx/Cx
1Cx
1Q
2Q
2CL
2B
2A
1A
1B
1CL
1Q
2Q
2Cx
2Rx/Cx
GND
IC231 MM74HC123AN
R282 10K
D232
D231
MUTING
D031～D033 1SS133



ENB-078-1
P604
+15V
+5V
GND
-15V
TO ENP-006
49
LOGIC IC +5V
LOGIC IC GND
R261 47K
C261 150P
R262 47K
P603
DATA
SDOUT1
SIOCK
LRCK
NC
NC
TO ENP 006
IC211 1/4x2 74HC32
IC212 1/6x3 74HC04
IC213 74HC02
IC212 1/6x2 74HC04
D261
D262
D263
D264
C263 2.2μ 25V
C264 2.2μ 25V
R263 22K
R264 22K
13.2
IC 614 VC4580
R265 22K
R266 22K
a , b TO ENP-006
a
b
D266
D265
-13.7
P605
D. GND
NC
NC
NC
TO ENP-006
D267
R267 100K
C265 220P
R268 10K
IC212 1/6x2 74HC04
R269 1K
R270 100K
D268 MTZ2.7JTB
IC211 1/4x3 74HC32
NC
NC
D261～D267 1SS133
A/D OFFSET SERVO
IC212
IC213
IC211
+5V

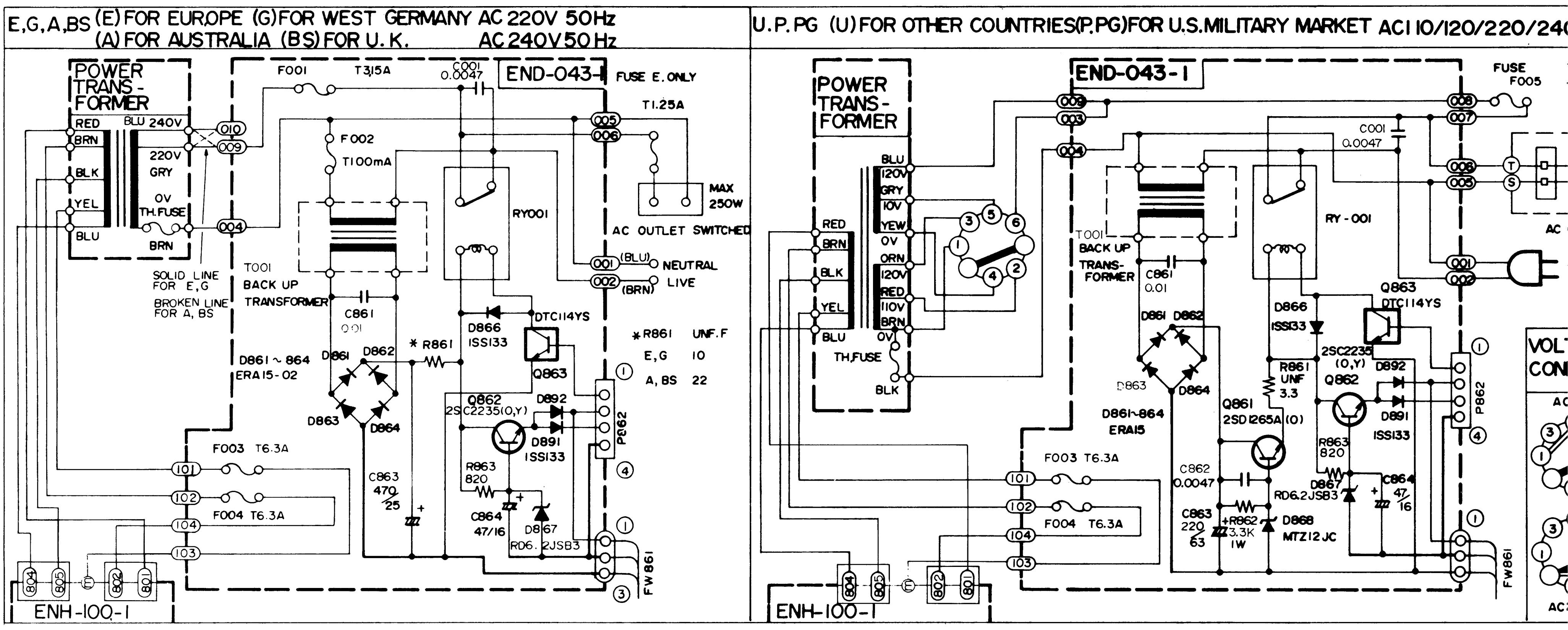


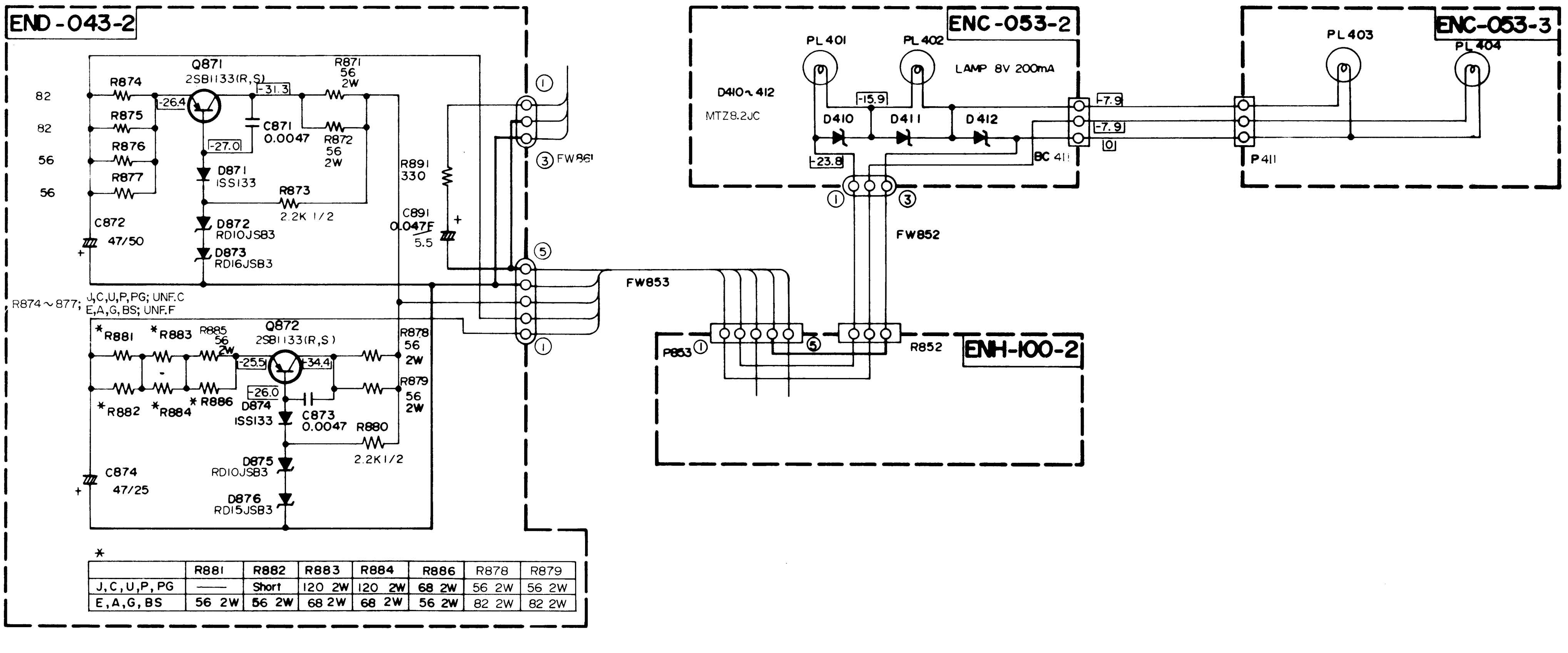
NB-078-2
Q236
Q235
Q234
Q233
2SC3068 x 4
R288 10K
R287 10K
R286 10K
R285 10K
R291 1K
R292 1K
Q232 2SC1685
R284 10K
R283 10K
2SC1685
Q231 DTA144E
D233
R280 2.2K
D234 MTZ5.1JBT
R281 100K
C282 10μ/16V
132
-13.7
C231 0.022
50
Vcc
1Rx/Cx
1Cx
1Q
2Q
2CL
2B
2A
1A
1B
1CL
1Q
2Q
2Cx
2Rx/Cx
GND
IC231 MM74HC123AN
R282 10K
D232
D231
R289 1K
R290 1K
MUTING
D031～D033 1SS133



ENB-078-1
P604
+15V
+5V
GND
-15V
TO ENP-006
49
LOGIC IC +5V
LOGIC IC GND
13.2
R261 47K
C261 150P
R262 47K
C263 2.2μ 25V
C264 2.2μ 25V
D261
D262
D263
D264
R263 22K
R264 22K
R265 22K
R266 22K
IC614 VC4580
a, b TO ENP-006
P603
DATA
SDOUT1
SIOCK
LRCK
NC
TO ENP 006
IC211 1/4x2 74HC32
IC212 1/6x3 74HC04
IC213 74HC02
IC212 1/6x2 74HC04
D266
D265
-137
P605
D. GND
NC
TO ENP-006
D267
R267 100K
C265 220P
R268 10K
IC212 1/6x2 74HC04
R269 1K
R270 100K
D268 MTZ2.7JTB
IC211 1/4x3 74HC32
D261～D267 1SS133
A/D OFFSET SERVO
IC212 74HC04
IC213 74HC02
IC211 74HC32
+5V
GND

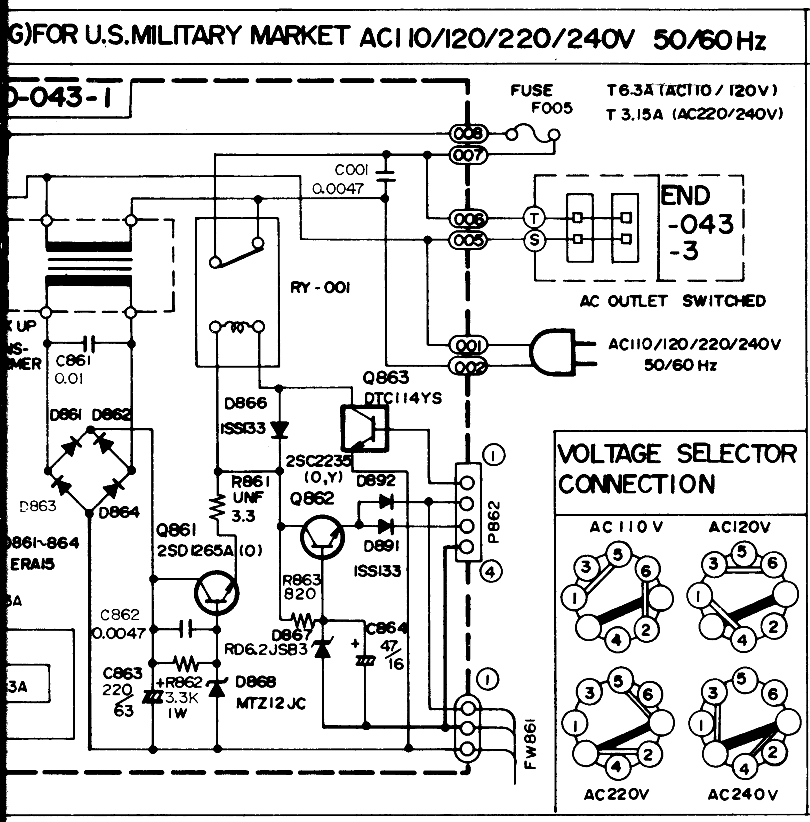
(8) Power Supply Section


E,G,A,BS (E) FOR EUROPE (G) FOR WEST GERMANY AC 220V 50Hz
(A) FOR AUSTRALIA (BS) FOR U.K. AC 240V 50 Hz
POWER TRANS-FORMER
END-043-1
F001 T3.15A
C001 0.0047
FUSE E. ONLY
T1.25A
F002 T100mA
MAX 250W
RY001
AC OUTLET SWITCHED
NEUTRAL
LIVE
T001 BACK UP TRANSFORMER
SOLID LINE FOR E,G
BROKEN LINE FOR A, BS
C861 0.01
D866 ISS133
DTC114YS
Q863
*R861 UNF.F
E,G 10
A, BS 22
D861 ~ 864 ERA15-02
Q862 2SC2235(O,Y)
D892
D891 ISS133
P862
R863 820
C863 470/25
C864 47/16
D867 RD6.2JSB3
F003 T6.3A
F004 T6.3A
FW861
ENH-100-1
U.P.PG (U) FOR OTHER COUNTRIES (P.PG) FOR U.S. MILITARY MARKET AC 110/120/220/24
END-043-1
FUSE F005
C001 0.0047
RY-001
TH.FUSE
BACK UP TRANS-FORMER
C861 0.01
D861~864 ERA15
Q861 2SD1265A(O)
R861 UNF 3.3
Q863 DTC114YS
2SC2235 (O,Y) Q862
D892
D891 ISS133
R863 820
C862 0.0047
C863 220/63
R862 3.3K 1W
D868 MTZ12JC
D867 RD6.2JSB3
C864 47/16
F003 T6.3A
F004 T6.3A
FW861
ENH-100-1
VOL
CON

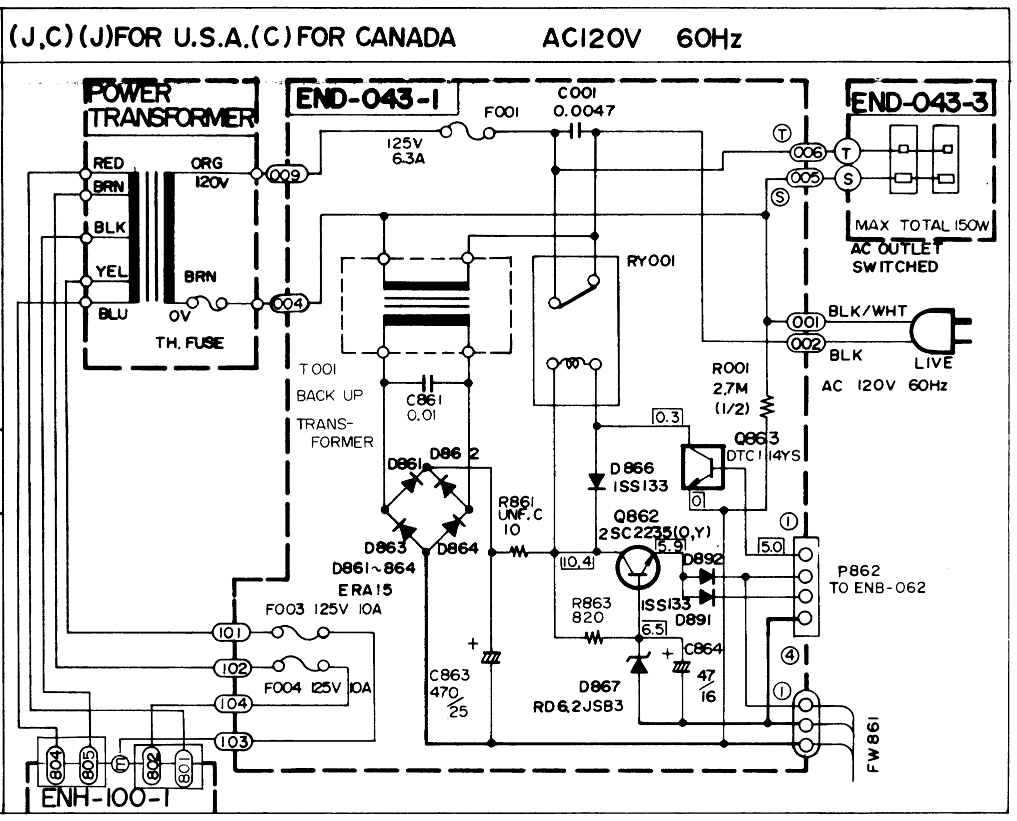

END-043-2
Q871 2SB1133(R,S)
R871 56 2W
R872 56 2W
R874 82
R875 82
R876 56
R877 56
C871 0.0047
D871 ISS133
R873 2.2K 1/2
D872 RD10JSB3
D873 RD16JSB3
C872 47/50
R891 330
C891 0.047F 5.5
FW861
R874 ~ 877; J,C,U,P,PG; UNF.C
E,A,G,BS; UNF.F
Q872 2SB1133(R,S)
*R881 *R883 R885 56 2W
*R882 *R884 *R886
R878 56 2W
R879 56 2W
D874 ISS133
C873 0.0047
R880 2.2K 1/2
D875 RD10JSB3
D876 RD15JSB3
C874 47/25
-26.4
-31.3
-27.0
-25.5
-34.4
-26.0
ENC-053-2
PL401
PL402
LAMP 8V 200mA
D410~412 MTZ8.2JC
D410 D411 D412
-15.9
-23.8
-7.9
-7.9
BC 411
FW852
FW853
ENC-053-3
PL403
PL404
P411
P853
R852
ENH-100-2

*

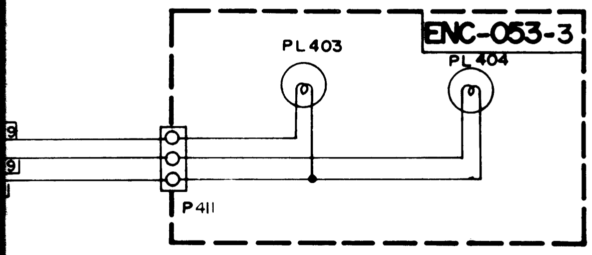
	R881	R882	R883	R884	R886	R878	R879
J,C,U,P,PG	——	Short	120 2W	120 2W	68 2W	56 2W	56 2W
E,A,G,BS	56 2W	56 2W	68 2W	68 2W	56 2W	82 2W	82 2W


G)FOR U.S.MILITARY MARKET AC110/120/220/240V 50/60Hz

D-043-1
FUSE
F005
T6.3A (AC110 / 120V)
T 3.15A (AC220/240V)
008
007
C001
0.0047
006
005
T
S
END
-043
-3
AC OUTLET SWITCHED
RY-001
001
002
AC110/120/220/240V
50/60 Hz
K UP
NS-
MER
C861
0.01
D861
D862
D863
D864
D861~864
ERA15
3A
3A
Q863
DTC114YS
D866
ISS133
R861
UNF
3.3
2SC2235
(O,Y)
Q862
D892
D891
ISS133
P862
1
4
Q861
2SD1265A (O)
R863
820
C862
0.0047
D867
RD6.2JSB3
C864
47/16
C863
220/63
R862
3.3K
1W
D868
MTZ12JC
1
FW861
VOLTAGE SELECTOR CONNECTION
AC110V
AC120V
AC220V
AC240V
1
2
3
4
5
6


(J,C) (J)FOR U.S.A.(C) FOR CANADA AC120V 60Hz

POWER TRANSFORMER
RED
BRN
BLK
YEL
BLU
ORG
120V
BRN
0V
TH. FUSE
009
004
END-043-1
F001
125V
6.3A
C001
0.0047
T
006
005
S
END-043-3
T
S
MAX TOTAL 150W
AC OUTLET SWITCHED
RY001
001
002
BLK/WHT
BLK
LIVE
AC 120V 60Hz
T001
BACK UP
TRANS-
FORMER
C861
0.01
R001
2.7M
(1/2)
0.3
Q863
DTC114YS
0
D866
ISS133
D861
D862
D863
D864
D861~864
ERA15
R861
UNF.C
10
Q862
2SC2235(O,Y)
10.4
5.9
5.0
D892
ISS133
D891
P862
TO ENB-062
1
4
1
R863
820
6.5
C864
47/16
D867
RD6.2JSB3
C863
470/25
F003 125V 10A
F004 125V 10A
101
102
104
103
804
805
802
801
ENH-100-1
FW861


ENC-053-3
PL403
PL404
P411
9
9

PARTS LIST

Contents

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- ENF-042 ☐ Source Select PC Board Ass'y ········ 2—13
- ENA-071 ☐ Tuner PC Board Ass'y ········ 2—17
- ENE-046 ☐ Signal Control PC Board Ass'y ········ 2—20
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- ENP-006 ☐ DAP PC Board Ass'y ········ 2—25
- ENB-073 ☐ SEA Display PC Board Ass'y ········ 2—27
- ENC-053 ☐ SEA Switch PC Board Ass'y ········ 2—29
- ENB-078 A Muting Control PC Board Ass'y ········ 2—30
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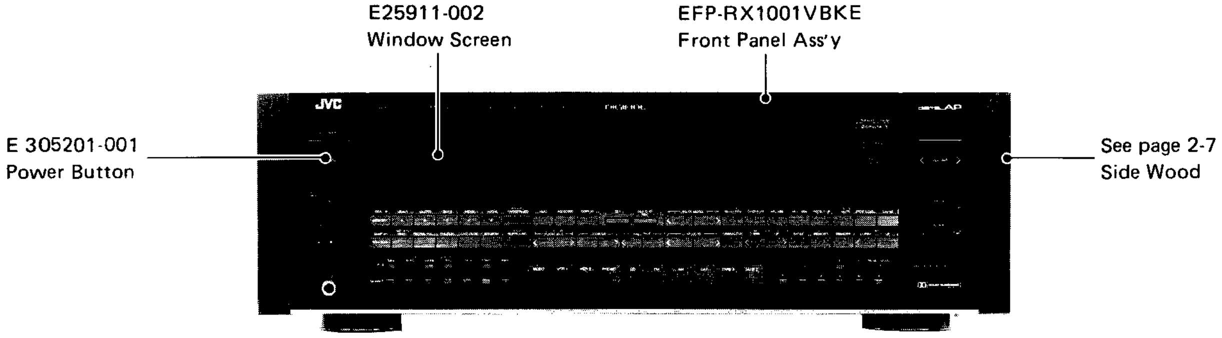
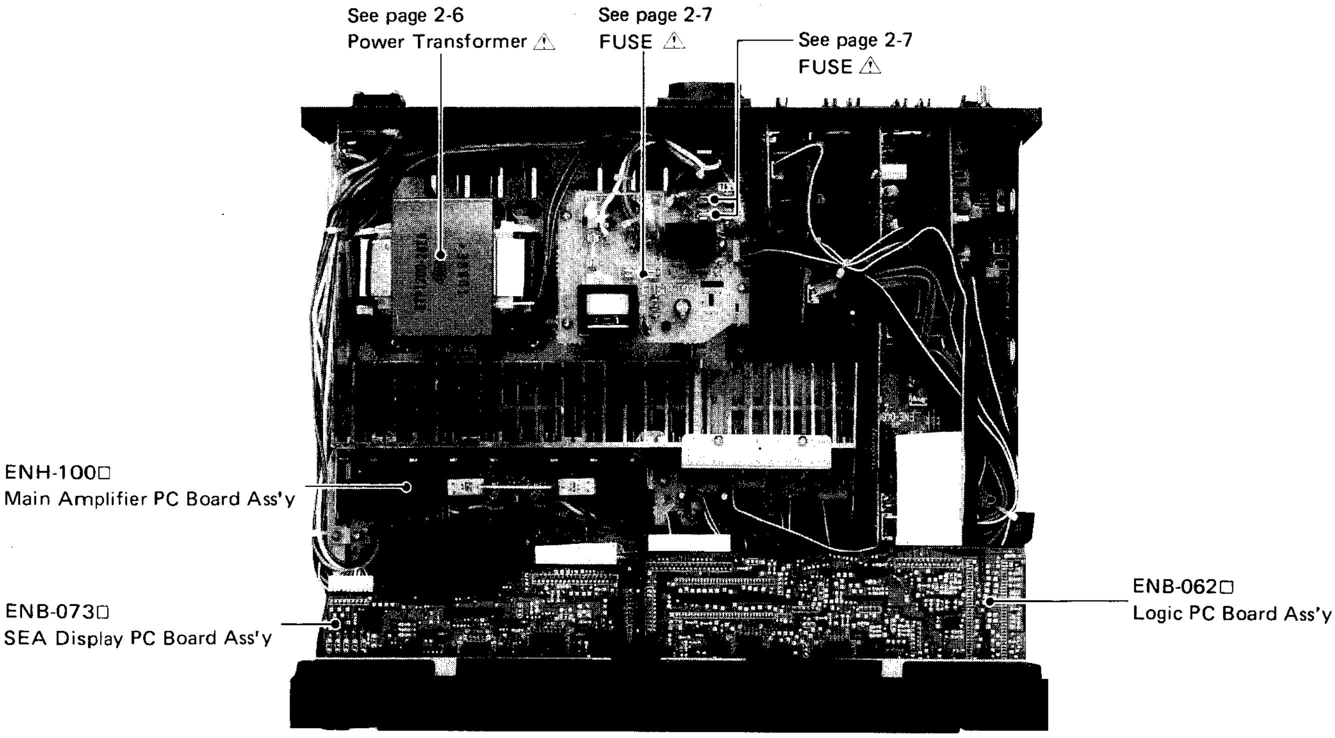
Main Parts Locations

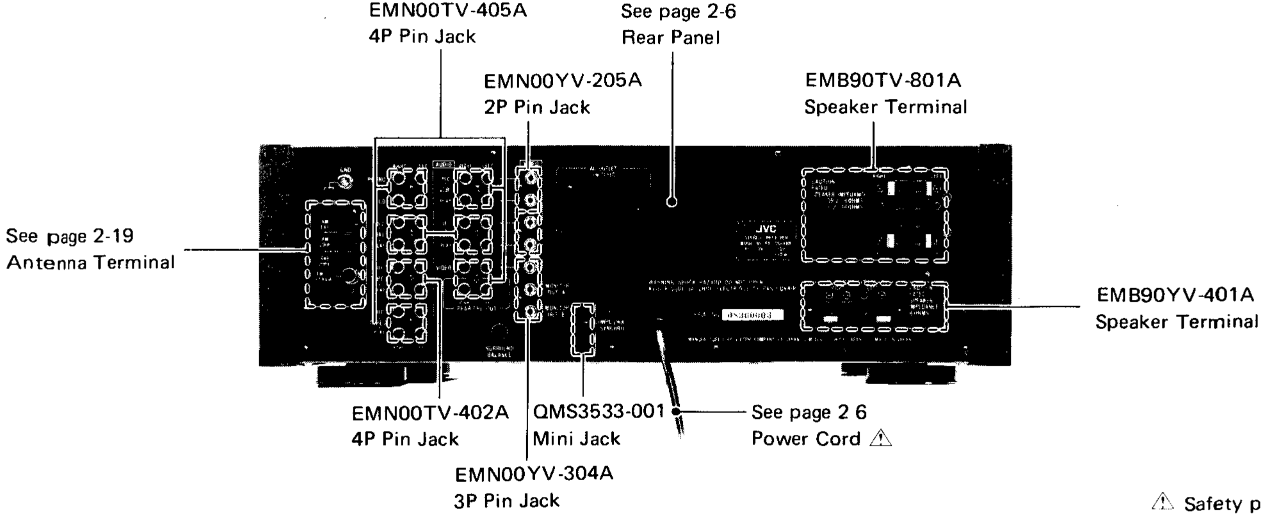
■ Front View


E25911-002
Window Screen
EFP-RX1001VBKE
Front Panel Ass'y
E 305201-001
Power Button
See page 2-7
Side Wood

■ Top View

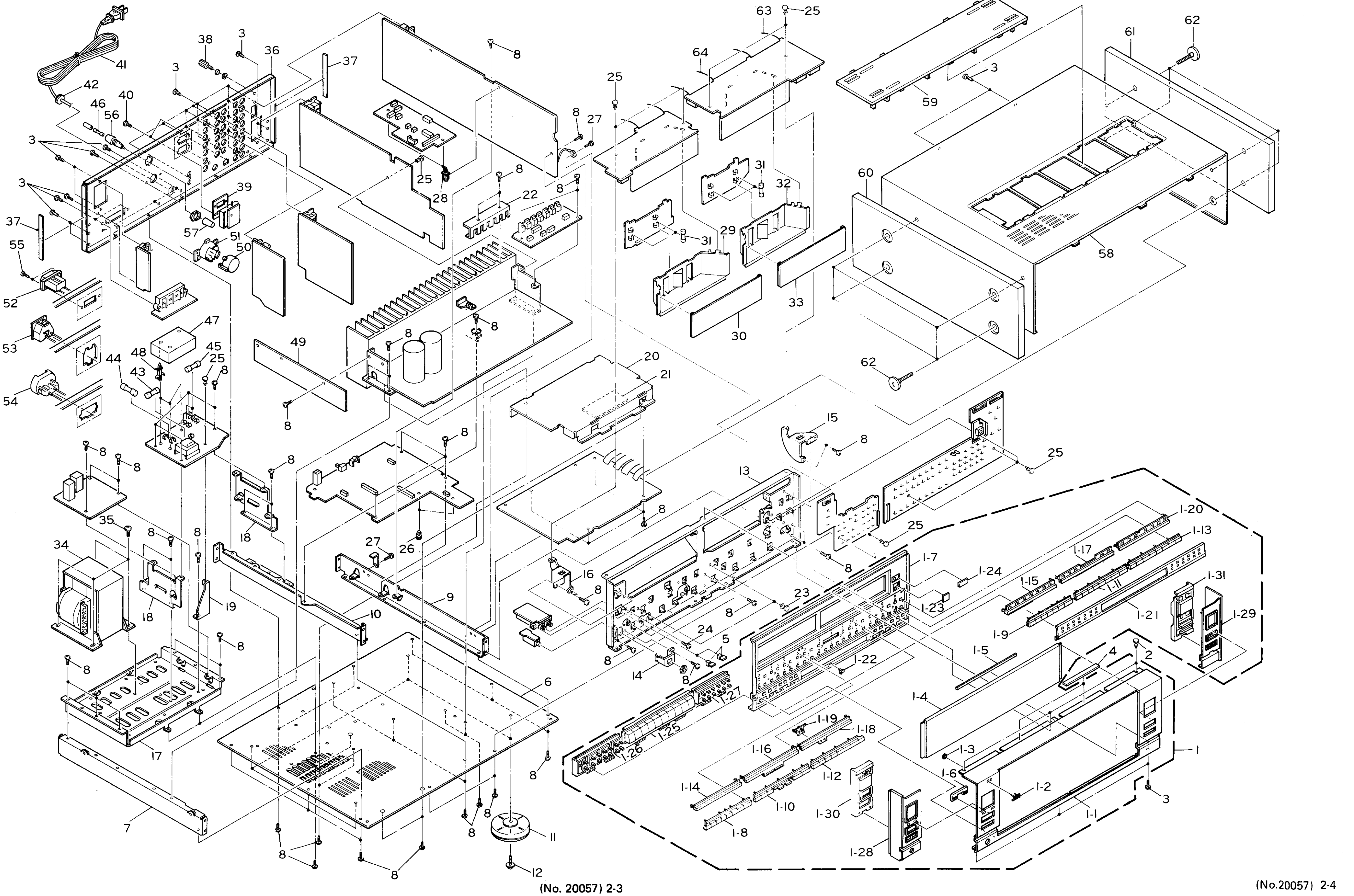

See page 2-6
Power Transformer ⚠
See page 2-7
FUSE ⚠
See page 2-7
FUSE ⚠
ENH-100□
Main Amplifier PC Board Ass'y
ENB-073□
SEA Display PC Board Ass'y
ENB-062□
Logic PC Board Ass'y

■ Rear View


EMN00TV-405A
4P Pin Jack
See page 2-6
Rear Panel
EMN00YV-205A
2P Pin Jack
EMB90TV-801A
Speaker Terminal
See page 2-19
Antenna Terminal
EMB90YV-401A
Speaker Terminal
EMN00TV-402A
4P Pin Jack
QMS3533-001
Mini Jack
See page 2 6
Power Cord ⚠
EMN00YV-304A
3P Pin Jack

⚠ Safety parts

Exploded View and Parts List


63
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1-16
1-12
17
8
1-6
1
1-2
1-14
1-30
3
1-10
1-1
7
8
11
1-8
8
1-28
8
12

Parts List

⚠	Item No.	Parts Number	Parts Name	Q'ty	Description	Areas
	1	EFP-RX1001VBKE	FRONT PANEL ASS'Y	1		
	1- 1	E11650-002	FRONT PANEL	1		
	1- 2	E72968-001	MARK	1		
	1- 3	E60912-003	SPEED NUT	1		
	1- 4	E25911-002	WINDOW SCREEN	1		
	1- 5	E74913-001	TAPE	1		
	1- 6	E74543-001	INDICATOR	1		
	1- 7	E11648-001	FRONT BASE	1		
	1- 8	E305189-001	PUSH BUTTON	1		
	1- 9	E305195-001	PUSH BUTTON	1		
	1-10	E305191-001	PUSH BUTTON	1		
	1-11	E305197-001	PUSH BUTTON	1		
	1-12	E305193-001	PUSH BUTTON	1		
	1-13	E305199-001	PUSH BUTTON	1		
	1-14	E305169-001	CAP	1		
	1-15	E305175-001	CAP	1		
	1-16	E305171-001	CAP	1		
	1-17	E305177-001	CAP	1		
	1-18	E305173-001	CAP	1		C,J
		E305173-002	CAP	1		EXCEPT C,J
	1-19	E74542-001	INDICATOR	1		
	1-20	E305179-001	CAP	1		
	1-21	E25916-001	PANEL	1		
	1-22	E74884-001	EARTH PLATE	1		
	1-23	E72436-006	SCREEN	1		
	1-24	E72437-006	SHEET	1		
	1-25	E25909-001	SOURCE BUTTON	1		
	1-26	E26030-001	BUTTON	1	SEA	
	1-27	E25908-001	PRESET BUTTON	1	TUNER	
	1-28	E25922-001	ESCUTCHEON	1	(L)	
	1-29	E25923-001	ESCUTCHEON	1	(R)	
	1-30	E305201-001	POWER BUTTON	1		
	1-31	E305203-001	VOLUME BUTTON	1		
	2	E48729-009	PLASTIC RIVET	3		
	3	SBSE3008M	SCREW	29		A,BS,E
		SBSE3008M	SCREW	30		C,J,G
		SBSE3008M	SCREW	31		P,PG,U
	4	EX0078006N30S02	FELT SPACER	2		
	5	E72790-001	PUSH KNOB	2		
	6	E11647-001	BOTTOM PLATE	1		
	7	E305167-001	SIDE BRACKET	1	(L)	
	8	SBSE3008CC	SCREW	65		
	9	E305168-001	SIDE BRACKET	1	(R)	
	10	E305166-001	CENTER BRACKET	1		

⚠ Safety parts

⚠	Item No.	Parts Number	Parts Name	Q'ty	Description	Areas
	11	E74522-001	FOOT ASS'Y	4		
	12	GBST3008CC	SCREW	4	FOOT	
	13	E11649-001	FRONT BRACKET	1		
	14	E74541-001	HEADPHONE BRACKET	1		
	15	E305211-001	STAY BRACKET	1	(R)	
	16	E305211-002	STAY BRACKET	1	(L)	
	17	E25914-001	TRANS BRACKET	1		
	18	E305208-001	CIRCUIT BOARD BRACKET	2		
	19	E74547-001	BRACKET	1		
	20	E25915-001	BRACKET	1	DAP	
	21	E74949-001	SHIELD PLATE	1		
	22	E74550-001	LEAF SPRING	1	HEAT SINK	
	23	E48729-007	PLASTIC RIVET	2		BS
	24	SBST3006CC	SCREW	2		
	25	E48729-008	PLASTIC RIVET	11		
	26	E305431-001	FASTENER	2	MOTHER	
	27	E74304-002	SPECIAL SCREW	2		
	28	E305419-001	FASTNER	2	TUNER	
	29	E305209-001	LAMP HOLDER	1	SEA	
	30	E305212-001	SHEET ASS'Y	1	SEA	
	31	ELP4101-8200A	FUSE LANP	4		
	32	E305210-001	LAMP HOLDER	1		
	33	E305212-003	SHEET ASS'Y	1		
⚠	34	ETP1200-26JA	POWER TRANSFORMER	1		C,J
⚠		ETP1200-26FA	POWER TRANSFORMER	1		U,P,PG
⚠		ETP1200-26EA	POWER TRANSFORMER	1		A,E,G
⚠		ETP1200-26EABS	POWER TRANSFORMER	1		BS
	35	E65389-005	SPECIAL SCREW	4		
	36	E25918-001	REAR PANEL	1		C,J
		E25918-002	REAR PANEL	1		U,P,PG
		E25918-003	REAR PANEL	1		E
		E25918-004	REAR PANEL	1		A
		E25918-005	REAR PANEL	1		G
		E25918-006	REAR PANEL	1		BS
	37	EX0085010R10S	FELT SPACER	2	SIDE	
	38	E70078-001	EARTH TERMINAL	1		
	39	E69589-008	SPACER	1		J
	40	SDSB3008M	SCREW	2		C,J,P,PG,U
⚠	41	QMP1480-200	POWER CORD	1		C,J
⚠		QMP7600-200	POWER CORD	1		P,PG,U
⚠		QMP3900-200	POWER CORD	1		E
⚠		QMP2560-244	POWER CORD	1		A
⚠		QMP9017-008BS	POWER CORD	1		BS
⚠		QMP39A0-200	POWER CORD	1		G
⚠	42	QHS3876-162	CORD STOPPER	1		EXCEPT BS

⚠ Safety parts

⚠	Item No.	Parts Number	Parts Name	Q'ty	Description	Areas
⚠		QHS3876-162BS	CORD STOPPER	1		BS
⚠	43	QMF61U1-6R3	FUSE	1	F001	C,J
⚠		QMF51A2-3R15S	FUSE	1	F001	A,E,G,PG,U
⚠		QMF51E2-3R15SBS	FUSE	1	F001	BS
⚠	44	QMF51A2-R10S	FUSE	1	F002	A,E,G
⚠		QMF51E2-R10SBS	FUSE	1	F002	BS
⚠	45	QMF51U1-100	FUSE	2	F003,F004	C,J
⚠		QMF51A2-6R3S	FUSE	2	F003,F004	EXCEPT BS,C,J
⚠		QMF51E2-6R3SBS	FUSE	2	F003,F004	BS
⚠	46	QMF51A2-3R15S	FUSE	1	F001	PG,U
⚠		QMF51A2-6R3S	FUSE	1	F001	P
⚠		QMF51A2-1R25S	FUSE	1	F005	E
	47	E305484-001	PRIMARY COVER	1		A,BS,E,G
	48	E302321-001	FASTENER	3		A,BS,E,G
	49	E74832-001	SHEET	1		
	50	E302764-001	VOLTAGE SELECTOR COVER	1		P,PG,U
⚠	51	QSR0085-008U	VOLTAGE SELECTOR	1		P,PG,U
⚠	52	QMC0240-002	AC OUTLET	1		E,G
⚠	53	EMC0232-001BS	AC OUTLET	1		BS
⚠	54	EMC0233-001	AC OUTLET	1		A
	55	SBSB3016M	SCREW	2		E,G
⚠	56	QMG0301-003	FUSE HOLDER	1		E,P,PG,U
	57	E69291-001	FUSE COVER	1		E,P,PG,U
	58	E11652-002	METAL COVER	1		EXCEPT BS,E
		E11653-002	METAL COVER	1		BS,E
	59	E23862-005	GRILLE	1		BS,E
	60	ED37924-001	SIDE WOOD	1	(L)	
	61	ED37924-002	SIDE WOOD	1	(R)	
	62	ED44071-001	SCREW	8	SIDE BOARD	
	63	EWR1WE-11PP-X	FLAT CABLE	1	FW 442	
	64	EWR1XE-15PP	FLAT CABLE	1	FW 443	

⚠Safety parts

The Marks for Designated Areas

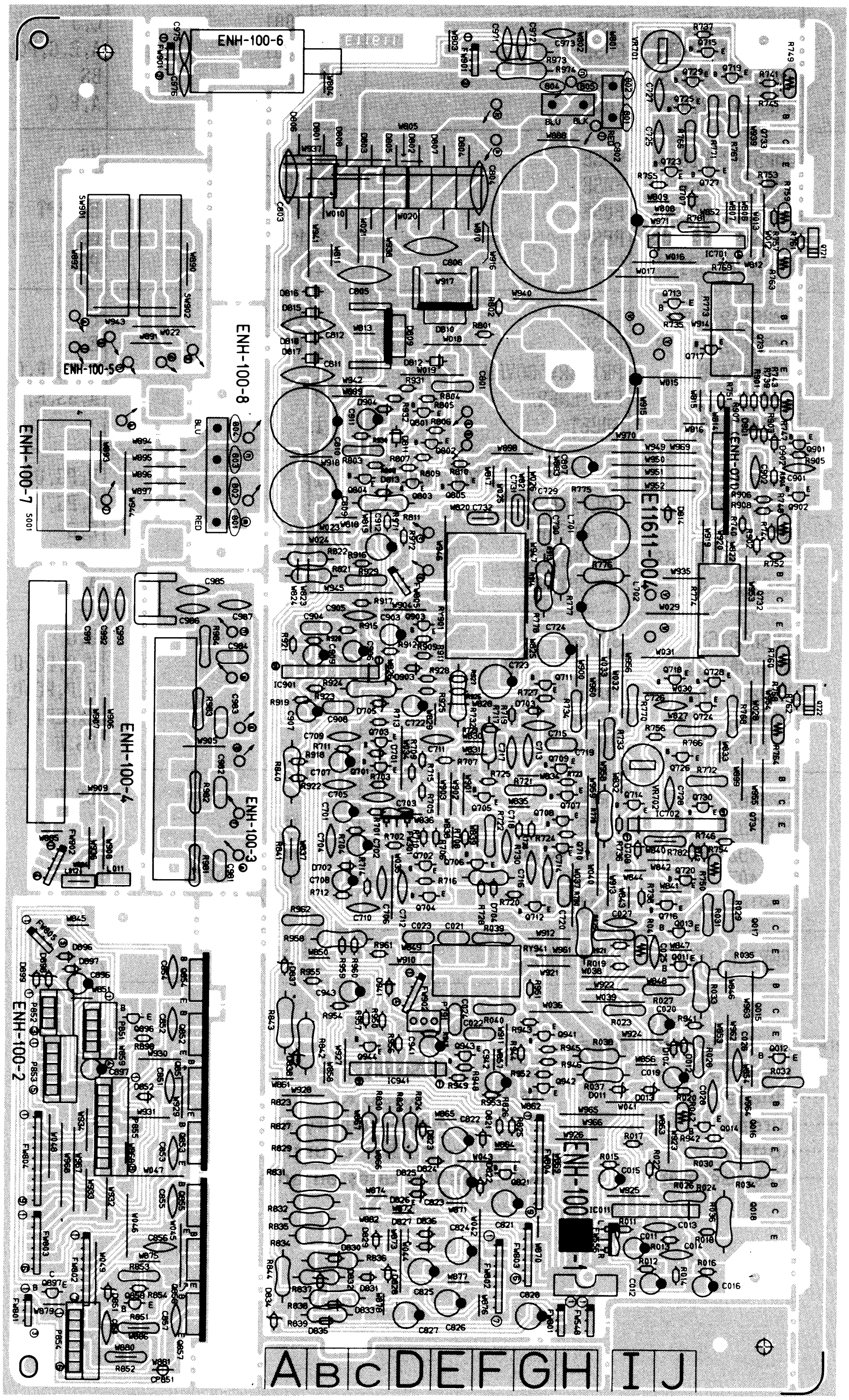
J················ the U.S.A.
C················Canada
E················Europe
A················Australia
G················West Germany

ES················Spain
BS················ the U.K.
P,PG············U.S.Military Market
U················Other Countries
No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-100 □ Main Amplifier PC Board Ass'y

Note ENH-100□ Varies according to the areas employed. See note (1) when placing an order.


ENH-100-6
ENH-100-5
ENH-100-7
ENH-100-8
ENH-100-4
ENH-100-3
ENH-100-2
ENH-100-1
E1611-004
A B C D E F G H I J

Note (1)

PC Board Ass'y	Designated Areas
ENH-100 🄰	the U.S.A.
ENH-100 🄱	Canada
ENH-100 🄲	U.S.Military Market, Other Countries
ENH-100 🄳	Europe,Australia
ENH-100 🄴	the U.K.
ENH-100 🄵	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q011	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q012	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q013	2SA965(O,Y)	SILICON	TOSHIBA	
	Q014	2SA965(O,Y)	SILICON	TOSHIBA	
	Q015	2SC3854LF(O,Y)	SILICON		
	Q016	2SC3854LF(O,Y)	SILICON		
	Q017	2SA1490LF(O,Y)	SILICON		
	Q018	2SA1490LF(O,Y)	SILICON		
	Q701	2SC2240(A,B)	SILICON	TOSHIBA	
	Q702	2SC2240(A,B)	SILICON	TOSHIBA	
	Q703	2SC2240(A,B)	SILICON	TOSHIBA	
	Q704	2SC2240(A,B)	SILICON	TOSHIBA	
	Q705	2SA1038(S,E)	SILICON		
	Q706	2SA1038(S,E)	SILICON		
	Q707	2SA933LN(R,S)	SILICON	ROHM	
	Q708	2SA933LN(R,S)	SILICON	ROHM	
	Q709	2SA1038(S,E)	SILICON		
	Q710	2SA1038(S,E)	SILICON		
	Q711	2SC2389(S,E)	SILICON	ROHM	
	Q712	2SC2389(S,E)	SILICON	ROHM	
	Q713	2SC1740(R,S)	SILICON	ROHM	
	Q714	2SC1740(R,S)	SILICON	ROHM	
	Q715	2SA933LN(R,S)	SILICON	ROHM	
	Q716	2SA933LN(R,S)	SILICON	ROHM	
	Q717	2SC2389(S,E)	SILICON	ROHM	
	Q718	2SC2389(S,E)	SILICON	ROHM	
	Q719	2SA1038(S,E)	SILICON		
	Q720	2SA1038(S,E)	SILICON		
	Q721	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q722	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q723	2SC2389(S)	SILICON	ROHM	
	Q724	2SC2389(S)	SILICON	ROHM	
	Q725	2SA1038(S)	SILICON		
	Q726	2SA1038(S)	SILICON		
	Q727	2SD669A(B,C)	SILICON	HITACHI	
	Q728	2SD669A(B,C)	SILICON	HITACHI	
	Q729	2SB649A(B,C)	SILICON		
	Q730	2SB649A(B,C)	SILICON		
	Q731	2SC3857LF(O,Y)	SILICON		
	Q732	2SC3857LF(O,Y)	SILICON		
	Q733	2SA1493LF(O,Y)	SILICON		
	Q734	2SA1493LF(O,Y)	SILICON		
	Q801	2SA1038(S,E)	SILICON		
	Q802	2SC2389(S,E)	SILICON	ROHM	
	Q803	2SA1038(S,E)	SILICON		
	Q804	2SC2389(S,E)	SILICON	ROHM	
	Q805	2SC2389(S,E)	SILICON	ROHM	
	Q821	2SA933LN(R,S)	SILICON	ROHM	
	Q851	2SD1666(R,S)	SILICON	SANYO	
	Q852	2SB1133(R,S)	SILICON	SANYO	
	Q853	2SD1666(R,S)	SILICON	SANYO	
	Q854	2SD1666(R,S)	SILICON	SANYO	
	Q855	2SD1666(R,S)	SILICON	SANYO	
	Q856	2SB1133(R,S)	SILICON	SANYO	
	Q857	2SD1666(R,S)	SILICON	SANYO	
	Q858	2SC1740(R,S)	SILICON	ROHM	
	Q896	DTC114YS	SILICON	ROHM	
	Q897	DTC114YS	SILICON	ROHM	
	Q901	2SC2389(S,E)	SILICON	ROHM	
	Q902	2SC2389(S,E)	SILICON	ROHM	
	Q903	2SA1038(S,E)	SILICON		
	Q941	2SC2389(S,E)	SILICON	ROHM	
	Q942	2SC2389(S,E)	SILICON	ROHM	
	Q943	2SA1038(S,E)	SILICON		
	Q944	DTC114YS	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC011	M5209L	I.C.	MITSUBISHI	
	IC701	VC5022-2	I.C.	SANYO	
	IC702	VC5022-2	I.C.	SANYO	
	IC901	TA7317P	I.C.	TOSHIBA	
	IC941	TA7317P	I.C.	TOSHIBA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D011	RD10JSB3	ZENER	NEC	
	D012	RD10JSB3	ZENER	NEC	
	D013	RD10JSB3	ZENER	NEC	
	D014	RD10JSB3	ZENER	NEC	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D703	1SS133	SILICON	ROHM	
	D704	1SS133	SILICON	ROHM	
	D705	MTZ18JC	ZENER		
	D707	1SS133	SILICON	ROHM	
	D708	1SS133	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	D
	D801	30DF2SFC	SILICON	NIHONINTER	E
	D801	30DF2SFC	SILICON	NIHONINTER	F
	D801	30DL2FC	SILICON	NIHONINTER	A
	D801	30DL2FC	SILICON	NIHONINTER	B
	D801	30DL2FC	SILICON	NIHONINTER	C
	D802	30DF2SFC	SILICON	NIHONINTER	D
	D802	30DF2SFC	SILICON	NIHONINTER	E
	D802	30DF2SFC	SILICON	NIHONINTER	F
	D802	30DL2FC	SILICON	NIHONINTER	A
	D802	30DL2FC	SILICON	NIHONINTER	B
	D802	30DL2FC	SILICON	NIHONINTER	C
	D803	30DF2SFC	SILICON	NIHONINTER	D
	D803	30DF2SFC	SILICON	NIHONINTER	E
	D803	30DF2SFC	SILICON	NIHONINTER	F
	D803	30DL2FC	SILICON	NIHONINTER	A
	D803	30DL2FC	SILICON	NIHONINTER	B
	D803	30DL2FC	SILICON	NIHONINTER	C
	D804	30DF2SFC	SILICON	NIHONINTER	D
	D804	30DF2SFC	SILICON	NIHONINTER	E
	D804	30DF2SFC	SILICON	NIHONINTER	F
	D804	30DL2FC	SILICON	NIHONINTER	A
	D804	30DL2FC	SILICON	NIHONINTER	B
	D804	30DL2FC	SILICON	NIHONINTER	C
	D805	30DF2SFC	SILICON	NIHONINTER	D
	D805	30DF2SFC	SILICON	NIHONINTER	E
	D805	30DF2SFC	SILICON	NIHONINTER	F
	D805	30DL2FC	SILICON	NIHONINTER	A
	D805	30DL2FC	SILICON	NIHONINTER	B
	D805	30DL2FC	SILICON	NIHONINTER	C
	D806	30DF2SFC	SILICON	NIHONINTER	D
	D806	30DF2SFC	SILICON	NIHONINTER	E
	D806	30DF2SFC	SILICON	NIHONINTER	F
	D806	30DL2FC	SILICON	NIHONINTER	A
	D806	30DL2FC	SILICON	NIHONINTER	B
	D806	30DL2FC	SILICON	NIHONINTER	C
	D807	30DF2SFC	SILICON	NIHONINTER	D
	D807	30DF2SFC	SILICON	NIHONINTER	E
	D807	30DF2SFC	SILICON	NIHONINTER	F
	D807	30DL2FC	SILICON	NIHONINTER	A
	D807	30DL2FC	SILICON	NIHONINTER	B
	D807	30DL2FC	SILICON	NIHONINTER	C
	D808	30DF2SFC	SILICON	NIHONINTER	D
	D808	30DF2SFC	SILICON	NIHONINTER	E
	D808	30DF2SFC	SILICON	NIHONINTER	F
	D808	30DL2FC	SILICON	NIHONINTER	A
	D808	30DL2FC	SILICON	NIHONINTER	B
	D808	30DL2FC	SILICON	NIHONINTER	C
	D809	SF8D41	THYRISTOR	TOSHIBA	
	D810	SF8D41	THYRISTOR	TOSHIBA	
	D811	ERA15-02L19	SILICON		
	D812	ERA15-02L19	SILICON		
	D813	MTZ2.7JB	ZENER	ROHM	
	D814	MTZ6.2JC	ZENER	ROHM	
	D815	ERA15-02L19	SILICON		C
	D815	ERA15-02L19	SILICON		D
	D815	ERA15-02L19	SILICON		E
	D815	ERA15-02L19	SILICON		F
	D815	1SR35-200A	SILICON	ROHM	A
	D815	1SR35-200A	SILICON	ROHM	B
	D816	ERA15-02L19	SILICON		C
	D816	ERA15-02L19	SILICON		D
	D816	ERA15-02L19	SILICON		E
	D816	ERA15-02L19	SILICON		F

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D816	1SR35-200A	SILICON	ROHM	A
	D816	1SR35-200A	SILICON	ROHM	B
	D817	ERA15-02L19	SILICON		C
	D817	ERA15-02L19	SILICON		D
	D817	ERA15-02L19	SILICON		E
	D817	ERA15-02L19	SILICON		F
	D817	1SR35-200A	SILICON	ROHM	A
	D817	1SR35-200A	SILICON	ROHM	B
	D818	ERA15-02L19	SILICON		C
	D818	ERA15-02L19	SILICON		D
	D818	ERA15-02L19	SILICON		E
	D818	ERA15-02L19	SILICON		F
	D818	1SR35-200A	SILICON	ROHM	A
	D818	1SR35-200A	SILICON	ROHM	B
	D821	MTZ16JC	ZENER	ROHM	
	D822	1SS133	SILICON	ROHM	
	D823	MTZ16JC	ZENER	ROHM	
	D824	1SS133	SILICON	ROHM	
	D825	MTZ13JC	ZENER	ROHM	
	D826	MTZ13JC	ZENER	ROHM	
	D827	1SS133	SILICON	ROHM	
	D828	MTZ15JC	ZENER	ROHM	
	D829	1SS133	SILICON	ROHM	
	D830	MTZ18JC	ZENER		
	D831	1SS133	SILICON	ROHM	
	D832	MTZ18JC	ZENER		
	D833	1SS133	SILICON	ROHM	
	D834	MTZ6.2JC	ZENER	ROHM	
	D835	1SS133	SILICON	ROHM	
	D836	MTZ15JC	ZENER	ROHM	
	D837	MTZ12JC	ZENER	ROHM	D
	D837	MTZ12JC	ZENER	ROHM	E
	D837	MTZ12JC	ZENER	ROHM	F
	D838	MTZ12JC	ZENER	ROHM	D
	D838	MTZ12JC	ZENER	ROHM	E
	D838	MTZ12JC	ZENER	ROHM	F
	D851	RD5.6JSB3	ZENER	NEC	
	D852	1SS133	SILICON	ROHM	D
	D852	1SS133	SILICON	ROHM	E
	D852	1SS133	SILICON	ROHM	F
	D896	MA700A	ZENER	MATSUSHITA	
	D897	MA700A	ZENER	MATSUSHITA	
	D898	MTZ4.7JB	ZENER	ROHM	
	D899	MTZ4.7JB	ZENER	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D904	1SS133	SILICON	ROHM	
	D941	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C011	QETB1HM-475	4.7MF	50V	ELECTRO	
	C012	QETB1HM-475	4.7MF	50V	ELECTRO	
	C013	QCS21HJ-101	100PF	50V	CERAMIC	
	C014	QCS21HJ-101	100PF	50V	CERAMIC	
	C015	QETB1AM-107	100MF	10V	ELECTRO	
	C016	QETB1AM-107	100MF	10V	ELECTRO	
	C019	QETB1HM-226	22MF	50V	ELECTRO	
	C020	QETB1HM-226	22MF	50V	ELECTRO	
	C021	QFN81HK-223	0.022MF	50V	MYLAR	
	C022	QFN81HK-223	0.022MF	50V	MYLAR	
	C023	QFN81HK-223	0.022MF	50V	MYLAR	
	C024	QFN81HK-223	0.022MF	50V	MYLAR	
	C025	QCS21HJ-151	150PF	50V	CERAMIC	
	C026	QCS21HJ-151	150PF	50V	CERAMIC	
	C027	QCS21HJ-151	150PF	50V	CERAMIC	
	C028	QCS21HJ-151	150PF	50V	CERAMIC	
	C029	QCY21HK-272	2700PF	50V	CERAMIC	
	C030	QCY21HK-272	2700PF	50V	CERAMIC	
	C031	QCY21HK-272	2700PF	50V	CERAMIC	
	C032	QCY21HK-272	2700PF	50V	CERAMIC	
	C701	EEZ5003-106	10MF		ELECTRO	
	C702	EEZ5003-106	10MF		ELECTRO	
	C703	QCS21HJ-271	270PF	50V	CERAMIC	
	C704	QCS21HJ-271	270PF	50V	CERAMIC	
	C705	QCS21HJ-101	100PF	50V	CERAMIC	
	C706	QCS21HJ-101	100PF	50V	CERAMIC	
	C707	QETB1CM-476	47MF	16V	ELECTRO	
	C708	QETB1CM-476	47MF	16V	ELECTRO	
	C709	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C710	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C711	QCY21HK-332	3300PF	50V	CERAMIC	
	C712	QCY21HK-332	3300PF	50V	CERAMIC	
	C713	QCS21HJ-680	68PF	50V	CERAMIC	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C714	QCS21HJ-680	68PF	50V	CERAMIC	
	C715	QCS21HJ-680	68PF	50V	CERAMIC	
	C716	QCS21HJ-680	68PF	50V	CERAMIC	
	C717	QCS21HJ-220	22PF	50V	CERAMIC	
	C718	QCS21HJ-220	22PF	50V	CERAMIC	
	C719	QFN81HK-472	4700PF	50V	MYLAR	
	C720	QFN81HK-472	4700PF	50V	MYLAR	
	C722	QETB1EM-106	10MF	25V	ELECTRO	
	C723	QETB2AM-476	47MF	100V	ELECTRO	
	C724	QETB2AM-476	47MF	100V	ELECTRO	
	C725	QCS32HJ-470	47PF	500V	CERAMIC	
	C726	QCS32HJ-470	47PF	500V	CERAMIC	
	C727	QCS32HJ-470	47PF	500V	CERAMIC	
	C728	QCS32HJ-470	47PF	500V	CERAMIC	
	C729	QFN81HK-223	0.022MF	50V	MYLAR	A
	C729	QFN81HK-223	0.022MF	50V	MYLAR	C
	C729	QFN81HK-473	0.047MF	50V	MYLAR	B
	C729	QFN81HK-473	0.047MF	50V	MYLAR	D
	C729	QFN81HK-473	0.047MF	50V	MYLAR	E
	C729	QFN81HK-473	0.047MF	50V	MYLAR	F
	C730	QFN81HK-223	0.022MF	50V	MYLAR	A
	C730	QFN81HK-223	0.022MF	50V	MYLAR	C
	C730	QFN81HK-473	0.047MF	50V	MYLAR	B
	C730	QFN81HK-473	0.047MF	50V	MYLAR	D
	C730	QFN81HK-473	0.047MF	50V	MYLAR	E
	C730	QFN81HK-473	0.047MF	50V	MYLAR	F
	C731	QFN81HK-473	0.047MF	50V	MYLAR	B
	C731	QFN81HK-473	0.047MF	50V	MYLAR	D
	C731	QFN81HK-473	0.047MF	50V	MYLAR	E
	C731	QFN81HK-473	0.047MF	50V	MYLAR	F
	C732	QFN81HK-473	0.047MF	50V	MYLAR	B
	C732	QFN81HK-473	0.047MF	50V	MYLAR	D
	C732	QFN81HK-473	0.047MF	50V	MYLAR	E
	C732	QFN81HK-473	0.047MF	50V	MYLAR	F
	C801	EEW7501-129	12000MF	75V	ELECTRO	
	C802	EEW7501-129	12000MF	75V	ELECTRO	
	C803	QCE22HP-103	0.01MF	500V	CERAMIC	
	C804	QCE22HP-103	0.01MF	500V	CERAMIC	
	C805	QCE22HP-103	0.01MF	500V	CERAMIC	
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	
	C807	QETB1HM-226	22MF	50V	ELECTRO	
	C809	QETB1HM-108	1000MF	50V	ELECTRO	
	C810	QETB1HM-108	1000MF	50V	ELECTRO	
	C811	QCE22HP-103	0.01MF	500V	CERAMIC	
	C812	QCE22HP-103	0.01MF	500V	CERAMIC	
	C821	QETB1EM-107	100MF	25V	ELECTRO	
	C822	QETB1EM-107	100MF	25V	ELECTRO	
	C823	QETB1HM-107	100MF	50V	ELECTRO	
	C824	QETB1EM-227	220MF	25V	ELECTRO	
	C825	QETB1EM-107	100MF	25V	ELECTRO	
	C826	QETB1EM-107	100MF	25V	ELECTRO	
	C827	QETB1EM-107	100MF	25V	ELECTRO	
	C828	QETB1EM-107	100MF	25V	ELECTRO	
	C851	QCF21HP-472	4700PF	50V	CERAMIC	
	C852	QCF21HP-472	4700PF	50V	CERAMIC	
	C853	QCF21HP-472	4700PF	50V	CERAMIC	
	C854	QCF21HP-472	4700PF	50V	CERAMIC	
	C855	QCF21HP-472	4700PF	50V	CERAMIC	
	C856	QCF21HP-472	4700PF	50V	CERAMIC	
	C857	QCF21HP-472	4700PF	50V	CERAMIC	
	C858	QCF21HP-103	0.01MF	50V	CERAMIC	
	C896	QETB1HM-474	0.47MF	50V	ELECTRO	
	C897	QETB1HM-474	0.47MF	50V	ELECTRO	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1EM-226	22MF	25V	ELECTRO	
	C904	QCF21HP-103	0.01MF	50V	CERAMIC	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QETB1AM-476	47MF	10V	ELECTRO	
	C907	QETB1HM-474	0.47MF	50V	ELECTRO	
	C908	QFN81HK-153	0.015MF	50V	MYLAR	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C911	QETB1HM-225	2.2MF	50V	ELECTRO	
	C912	QETB1HM-227	220MF	50V	ELECTRO	
	C941	QETB1EM-226	22MF	25V	ELECTRO	
	C942	QETB1AM-476	47MF	10V	ELECTRO	
	C943	QETB1CM-226	22MF	16V	ELECTRO	
	C971	QCS21HJ-331	330PF	50V	CERAMIC	F
	C972	QCS21HJ-331	330PF	50V	CERAMIC	F
	C973	QCF21HP-103	0.01MF	50V	CERAMIC	F
	C975	QCS21HJ-331	330PF	50V	CERAMIC	F
	C976	QCS21HJ-331	330PF	50V	CERAMIC	F
	C981	QFN81HK-103	0.01MF	50V	MYLAR	F
	C982	QFN81HK-103	0.01MF	50V	MYLAR	F
	C983	QFN81HK-103	0.01MF	50V	MYLAR	F
	C984	QFN81HK-103	0.01MF	50V	MYLAR	F
	C985	QCF21HP-472	4700PF	50V	CERAMIC	F
	C991	QCY21HK-102	1000PF	50V	CERAMIC	F
	C992	QCY21HK-102	1000PF	50V	CERAMIC	F
	C993	QCF21HP-472	4700PF	50V	CERAMIC	F

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R011	QRD167J-222	2.2K	1/6W	CARBON	
	R012	QRD167J-222	2.2K	1/6W	CARBON	
	R013	QRD167J-104	100K	1/6W	CARBON	
	R014	QRD167J-104	100K	1/6W	CARBON	
	R015	QRD167J-272	2.7K	1/6W	CARBON	
	R016	QRD167J-272	2.7K	1/6W	CARBON	
	R017	QRD167J-104	100K	1/6W	CARBON	
	R018	QRD167J-104	100K	1/6W	CARBON	
	R019	QRD167J-822	8.2K	1/6W	CARBON	
	R020	QRD167J-822	8.2K	1/6W	CARBON	
	R021	QRD167J-822	8.2K	1/6W	CARBON	
	R022	QRD167J-822	8.2K	1/6W	CARBON	
⚠	R023	QRD14CJ-821S	820	1/4W	UNF.CARBON	A
⚠	R023	QRD14CJ-821S	820	1/4W	UNF.CARBON	B
⚠	R023	QRD14CJ-821S	820	1/4W	UNF.CARBON	C
⚠	R023	QRZ0077-821	820	1/4W	FUSIBLE	D
⚠	R023	QRZ0077-821	820	1/4W	FUSIBLE	E
⚠	R023	QRZ0077-821	820	1/4W	FUSIBLE	F
⚠	R024	QRD14CJ-821S	820	1/4W	UNF.CARBON	A
⚠	R024	QRD14CJ-821S	820	1/4W	UNF.CARBON	B
⚠	R024	QRD14CJ-821S	820	1/4W	UNF.CARBON	C
⚠	R024	QRZ0077-821	820	1/4W	FUSIBLE	D
⚠	R024	QRZ0077-821	820	1/4W	FUSIBLE	E
⚠	R024	QRZ0077-821	820	1/4W	FUSIBLE	F
⚠	R025	QRD14CJ-821S	820	1/4W	UNF.CARBON	A
⚠	R025	QRD14CJ-821S	820	1/4W	UNF.CARBON	B
⚠	R025	QRD14CJ-821S	820	1/4W	UNF.CARBON	C
⚠	R025	QRZ0077-821	820	1/4W	FUSIBLE	D
⚠	R025	QRZ0077-821	820	1/4W	FUSIBLE	E
⚠	R025	QRZ0077-821	820	1/4W	FUSIBLE	F
⚠	R026	QRD14CJ-821S	820	1/4W	UNF.CARBON	A
⚠	R026	QRD14CJ-821S	820	1/4W	UNF.CARBON	B
⚠	R026	QRD14CJ-821S	820	1/4W	UNF.CARBON	C
⚠	R026	QRZ0077-821	820	1/4W	FUSIBLE	D
⚠	R026	QRZ0077-821	820	1/4W	FUSIBLE	E
⚠	R026	QRZ0077-821	820	1/4W	FUSIBLE	F
⚠	R027	QRD14CJ-222S	2.2K	1/4W	UNF.CARBON	
⚠	R028	QRD14CJ-222S	2.2K	1/4W	UNF.CARBON	
⚠	R029	QRD14CJ-222S	2.2K	1/4W	UNF.CARBON	
⚠	R030	QRD14CJ-222S	2.2K	1/4W	UNF.CARBON	
⚠	R031	QRD14CJ-471S	470	1/4W	UNF.CARBON	
⚠	R032	QRD14CJ-471S	470	1/4W	UNF.CARBON	
⚠	R033	QRX022J-R22A	0.22	2W	M.FILM	
⚠	R034	QRX022J-R22A	0.22	2W	M.FILM	
⚠	R035	QRX022J-R22A	0.22	2W	M.FILM	
⚠	R036	QRX022J-R22A	0.22	2W	M.FILM	
⚠	R037	QRG012J-821A	820	1W	O.M.FILM	
⚠	R038	QRG012J-821A	820	1W	O.M.FILM	
⚠	R039	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R040	QRD14CJ-100S	10	1/4W	UNF.CARBON	
	R041	SDT250			THERMISTER	
	R042	SDT250			THERMISTER	
	R701	QRD167J-222	2.2K	1/6W	CARBON	
	R702	QRD167J-222	2.2K	1/6W	CARBON	
	R703	QRD167J-104	100K	1/6W	CARBON	
	R704	QRD167J-104	100K	1/6W	CARBON	
	R705	QRD167J-202	2K	1/6W	CARBON	
	R706	QRD167J-202	2K	1/6W	CARBON	
	R707	QRD167J-202	2K	1/6W	CARBON	
	R708	QRD167J-202	2K	1/6W	CARBON	
	R709	QRD167J-822	8.2K	1/6W	CARBON	
	R710	QRD167J-822	8.2K	1/6W	CARBON	
	R711	QRD167J-152	1.5K	1/6W	CARBON	
	R712	QRD167J-152	1.5K	1/6W	CARBON	
	R713	QRD167J-104	100K	1/6W	CARBON	
	R714	QRD167J-104	100K	1/6W	CARBON	
	R715	QRD167J-101	100	1/6W	CARBON	
	R716	QRD167J-101	100	1/6W	CARBON	
⚠	R717	QRD125J-153	15K	1/2W	UNF.CARBON	
⚠	R718	QRD125J-153	15K	1/2W	UNF.CARBON	
	R719	QRD167J-391	390	1/6W	CARBON	
	R720	QRD167J-391	390	1/6W	CARBON	
⚠	R721	QRD14CJ-151S	150	1/4W	UNF.CARBON	
⚠	R722	QRD14CJ-151S	150	1/4W	UNF.CARBON	
	R723	QRD167J-152	1.5K	1/6W	CARBON	
	R724	QRD167J-152	1.5K	1/6W	CARBON	
	R725	QRD167J-333	33K	1/6W	CARBON	
	R726	QRD167J-333	33K	1/6W	CARBON	
	R727	QRD167J-391	390	1/6W	CARBON	
	R728	QRD167J-391	390	1/6W	CARBON	
	R729	QRD167J-152	1.5K	1/6W	CARBON	
	R730	QRD167J-152	1.5K	1/6W	CARBON	
⚠	R732	QRG022J-562A	5.6K	2W	O.M.FILM	
⚠	R733	QRD14CJ-330S	33	1/4W	UNF.CARBON	
⚠	R734	QRD14CJ-330S	33	1/4W	UNF.CARBON	
	R735	QRD167J-103	10K	1/6W	CARBON	
	R736	QRD167J-103	10K	1/6W	CARBON	
	R737	QRD167J-103	10K	1/6W	CARBON	
	R738	QRD167J-103	10K	1/6W	CARBON	
	R739	QRD167J-221	220	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R740	QRD167J-221	220	1/6W	CARBON	
	R741	QRD167J-221	220	1/6W	CARBON	
	R742	QRD167J-221	220	1/6W	CARBON	
	R743	QRD167J-271	270	1/6W	CARBON	
	R744	QRD167J-271	270	1/6W	CARBON	
	R745	QRD167J-271	270	1/6W	CARBON	
	R746	QRD167J-271	270	1/6W	CARBON	
	R747	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R748	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R749	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R750	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R751	QRD167J-271	270	1/6W	CARBON	A
	R751	QRD167J-271	270	1/6W	CARBON	B
	R751	QRD167J-331	330	1/6W	CARBON	C
	R751	QRD167J-331	330	1/6W	CARBON	D
	R751	QRD167J-331	330	1/6W	CARBON	E
	R751	QRD167J-331	330	1/6W	CARBON	F
	R752	QRD167J-271	270	1/6W	CARBON	A
	R752	QRD167J-271	270	1/6W	CARBON	B
	R752	QRD167J-331	330	1/6W	CARBON	C
	R752	QRD167J-331	330	1/6W	CARBON	D
	R752	QRD167J-331	330	1/6W	CARBON	E
	R752	QRD167J-331	330	1/6W	CARBON	F
	R753	QRD167J-271	270	1/6W	CARBON	A
	R753	QRD167J-271	270	1/6W	CARBON	B
	R753	QRD167J-331	330	1/6W	CARBON	C
	R753	QRD167J-331	330	1/6W	CARBON	D
	R753	QRD167J-331	330	1/6W	CARBON	E
	R753	QRD167J-331	330	1/6W	CARBON	F
	R754	QRD167J-271	270	1/6W	CARBON	A
	R754	QRD167J-271	270	1/6W	CARBON	B
	R754	QRD167J-331	330	1/6W	CARBON	C
	R754	QRD167J-331	330	1/6W	CARBON	D
	R754	QRD167J-331	330	1/6W	CARBON	E
	R754	QRD167J-331	330	1/6W	CARBON	F
	R755	QRD167J-471	470	1/6W	CARBON	
	R756	QRD167J-471	470	1/6W	CARBON	
	R757	QRD167J-101	100	1/6W	CARBON	
	R758	QRD167J-101	100	1/6W	CARBON	
	R759	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R760	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R761	QRD167J-391	390	1/6W	CARBON	
	R762	QRD167J-391	390	1/6W	CARBON	
	R763	SDT250			THERMISTER	
	R764	SDT250			THERMISTER	
⚠	R765	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R766	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R767	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R768	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R769	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R770	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R771	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R772	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R773	ERF032K-R22	0.22	3W	CEMENT	
⚠	R774	ERF032K-R22	0.22	3W	CEMENT	
⚠	R775	QRD125J-330	33	1/2W	UNF.CARBON	A
⚠	R775	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R775	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R775	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R775	QRD125J-330	33	1/2W	UNF.CARBON	E
⚠	R775	QRD125J-470	47	1/2W	UNF.CARBON	F
⚠	R776	QRD125J-330	33	1/2W	UNF.CARBON	A
⚠	R776	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R776	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R776	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R776	QRD125J-330	33	1/2W	UNF.CARBON	E
⚠	R776	QRD125J-470	47	1/2W	UNF.CARBON	F
⚠	R777	QRG022J-100A	10	2W	O.M.FILM	
⚠	R778	QRG022J-100A	10	2W	O.M.FILM	
⚠	R779	QRX022J-R47A	0.47	2W	M.FILM	
⚠	R780	QRX022J-R47A	0.47	2W	M.FILM	
	R801	QRD167J-753	75K	1/6W	CARBON	
	R802	QRD167J-753	75K	1/6W	CARBON	
⚠	R803	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R804	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
	R805	QRD167J-472	4.7K	1/6W	CARBON	
	R806	QRD167J-472	4.7K	1/6W	CARBON	
	R807	QRD167J-103	10K	1/6W	CARBON	
	R808	QRD167J-103	10K	1/6W	CARBON	
	R809	QRD167J-122	1.2K	1/6W	CARBON	
	R810	QRD167J-333	33K	1/6W	CARBON	
⚠	R811	QRG022J-222A	2.2K	2W	O.M.FILM	
⚠	R821	QRX012J-1R2A	1.2	1W	M.FILM	
⚠	R822	QRX012J-1R2A	1.2	1W	M.FILM	
⚠	R823	QRG022J-330A	33	2W	O.M.FILM	C
⚠	R823	QRG022J-330A	33	2W	O.M.FILM	D
⚠	R823	QRG022J-330A	33	2W	O.M.FILM	E
⚠	R823	QRG022J-330A	33	2W	O.M.FILM	F
⚠	R823	QRG022J-470A	47	2W	O.M.FILM	A
⚠	R823	QRG022J-470A	47	2W	O.M.FILM	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R824	QRD125J-272	2.7K	1/2W	UNF.CARBON	
	R825	QRD167J-562	5.6K	1/6W	CARBON	
	R826	QRD167J-682	6.8K	1/6W	CARBON	
⚠	R827	QRG022J-330A	33	2W	O.M.FILM	C
⚠	R827	QRG022J-330A	33	2W	O.M.FILM	D
⚠	R827	QRG022J-330A	33	2W	O.M.FILM	E
⚠	R827	QRG022J-330A	33	2W	O.M.FILM	F
⚠	R827	QRG022J-470A	47	2W	O.M.FILM	A
⚠	R827	QRG022J-470A	47	2W	O.M.FILM	B
⚠	R828	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R829	QRD125J-122	1.2K	1/2W	UNF.CARBON	
⚠	R830	QRD125J-122	1.2K	1/2W	UNF.CARBON	
⚠	R831	QRG022J-470A	47	2W	O.M.FILM	
⚠	R832	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R834	QRG022J-470A	47	2W	O.M.FILM	
⚠	R835	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R836	QRG022J-560A	56	2W	O.M.FILM	
⚠	R837	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R838	QRG022J-560A	56	2W	O.M.FILM	
⚠	R839	QRD125J-272	2.7K	1/2W	UNF.CARBON	
⚠	R840	QRG022J-121A	120	2W	O.M.FILM	
⚠	R841	QRG022J-121A	120	2W	O.M.FILM	
⚠	R842	QRG022J-121A	120	2W	O.M.FILM	
⚠	R843	QRG022J-121A	120	2W	O.M.FILM	
⚠	R844	QRG012J-392A	3.9K	1W	O.M.FILM	
⚠	R851	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R851	QRD14CJ-220S	22	1/4W	UNF.CARBON	B
⚠	R851	QRD14CJ-220S	22	1/4W	UNF.CARBON	C
⚠	R851	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R851	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R851	QRZ0077-220	22	1/4W	FUSIBLE	F
⚠	R852	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R852	QRD14CJ-220S	22	1/4W	UNF.CARBON	B
⚠	R852	QRD14CJ-220S	22	1/4W	UNF.CARBON	C
⚠	R852	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R852	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R852	QRZ0077-220	22	1/4W	FUSIBLE	F
⚠	R853	QRD14CJ-560S	56	1/4W	UNF.CARBON	A
⚠	R853	QRD14CJ-560S	56	1/4W	UNF.CARBON	B
⚠	R853	QRD14CJ-560S	56	1/4W	UNF.CARBON	C
⚠	R853	QRZ0077-560	56	1/4W	FUSIBLE	D
⚠	R853	QRZ0077-560	56	1/4W	FUSIBLE	E
⚠	R853	QRZ0077-560	56	1/4W	FUSIBLE	F
	R854	QRD167J-182	1.8K	1/6W	CARBON	
	R898	QRD167J-103	10K	1/6W	CARBON	
	R901	QRD167J-102	1K	1/6W	CARBON	
	R902	QRD167J-102	1K	1/6W	CARBON	
	R903	QRD167J-562	5.6K	1/6W	CARBON	
	R904	QRD167J-562	5.6K	1/6W	CARBON	
	R905	QRD167J-123	12K	1/6W	CARBON	
	R906	QRD167J-123	12K	1/6W	CARBON	
	R907	QRD167J-102	1K	1/6W	CARBON	
	R908	QRD167J-102	1K	1/6W	CARBON	
	R909	QRD167J-103	10K	1/6W	CARBON	
	R911	QRD167J-332	3.3K	1/6W	CARBON	
	R912	QRD167J-473	47K	1/6W	CARBON	
	R913	QRD167J-104	100K	1/6W	CARBON	
	R914	QRD167J-823	82K	1/6W	CARBON	
	R915	QRD167J-823	82K	1/6W	CARBON	
	R916	QRD167J-563	56K	1/6W	CARBON	
	R917	QRD167J-683	68K	1/6W	CARBON	
	R918	QRD167J-392	3.9K	1/6W	CARBON	
	R919	QRD167J-392	3.9K	1/6W	CARBON	
	R920	QRD167J-333	33K	1/6W	CARBON	
	R921	QRD167J-224	220K	1/6W	CARBON	
	R922	QRD167J-562	5.6K	1/6W	CARBON	
	R923	QRD167J-220	22	1/6W	CARBON	
⚠	R924	QRG022J-271A	270	2W	O.M.FILM	A
⚠	R924	QRG022J-271A	270	2W	O.M.FILM	B
⚠	R924	QRG022J-271A	270	2W	O.M.FILM	C
⚠	R924	QRG026J-271AF	270	2W	O.M.FILM	D
⚠	R924	QRG026J-271AF	270	2W	O.M.FILM	E
⚠	R924	QRG026J-271AF	270	2W	O.M.FILM	F
	R925	QRD167J-180	18	1/6W	CARBON	
	R926	QRD167J-220	22	1/6W	CARBON	
	R927	QRD167J-180	18	1/6W	CARBON	
	R928	QRD167J-220	22	1/6W	CARBON	
⚠	R929	QRD14CJ-101S	100	1/4W	UNF.CARBON	C
⚠	R929	QRD14CJ-101S	100	1/4W	UNF.CARBON	D
⚠	R929	QRD14CJ-101S	100	1/4W	UNF.CARBON	E
⚠	R929	QRD14CJ-101S	100	1/4W	UNF.CARBON	F
⚠	R929	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R929	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
	R930	QRD167J-472	4.7K	1/6W	CARBON	
	R931	QRD167J-123	12K	1/6W	CARBON	
	R932	QRD167J-332	3.3K	1/6W	CARBON	
	R941	QRD167J-103	10K	1/6W	CARBON	
	R942	QRD167J-103	10K	1/6W	CARBON	
	R943	QRD167J-104	100K	1/6W	CARBON	
	R944	QRD167J-823	82K	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R945	QRD167J-123	12K	1/6W	CARBON	
	R946	QRD167J-123	12K	1/6W	CARBON	
	R947	QRD167J-103	10K	1/6W	CARBON	
	R948	QRD167J-332	3.3K	1/6W	CARBON	
	R949	QRD167J-473	47K	1/6W	CARBON	
	R950	QRD167J-563	56K	1/6W	CARBON	
	R951	QRD167J-333	33K	1/6W	CARBON	
	R952	QRD167J-333	33K	1/6W	CARBON	
	R953	QRD167J-823	82K	1/6W	CARBON	
	R954	QRD167J-224	220K	1/6W	CARBON	
	R955	QRD167J-562	5.6K	1/6W	CARBON	
	R956	QRD167J-392	3.9K	1/6W	CARBON	
	R957	QRD167J-683	68K	1/6W	CARBON	
⚠	R958	QRG022J-391A	390	2W	O.M.FILM	
	R959	QRD167J-680	68	1/6W	CARBON	
	R960	QRD167J-560	56	1/6W	CARBON	
	R961	QRD167J-680	68	1/6W	CARBON	
⚠	R962	QRD14CJ-121S	120	1/4W	UNF.CARBON	A
⚠	R962	QRD14CJ-121S	120	1/4W	UNF.CARBON	B
⚠	R962	QRD14CJ-181S	180	1/4W	UNF.CARBON	C
⚠	R962	QRD14CJ-181S	180	1/4W	UNF.CARBON	D
⚠	R962	QRD14CJ-181S	180	1/4W	UNF.CARBON	E
⚠	R962	QRD14CJ-181S	180	1/4W	UNF.CARBON	F
	R971	QRD167J-103	10K	1/6W	CARBON	
	R972	QRD167J-103	10K	1/6W	CARBON	
⚠	R973	QRG022J-471A	470	2W	O.M.FILM	
⚠	R974	QRG022J-471A	470	2W	O.M.FILM	
⚠	R981	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R982	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R983	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R984	QRZ0077-100	10	1/4W	FUSIBLE	F
	VR701	QVPE601-501	500	0.15W	VARIABLE	
	VR702	QVPE601-501	500	0.15W	VARIABLE	

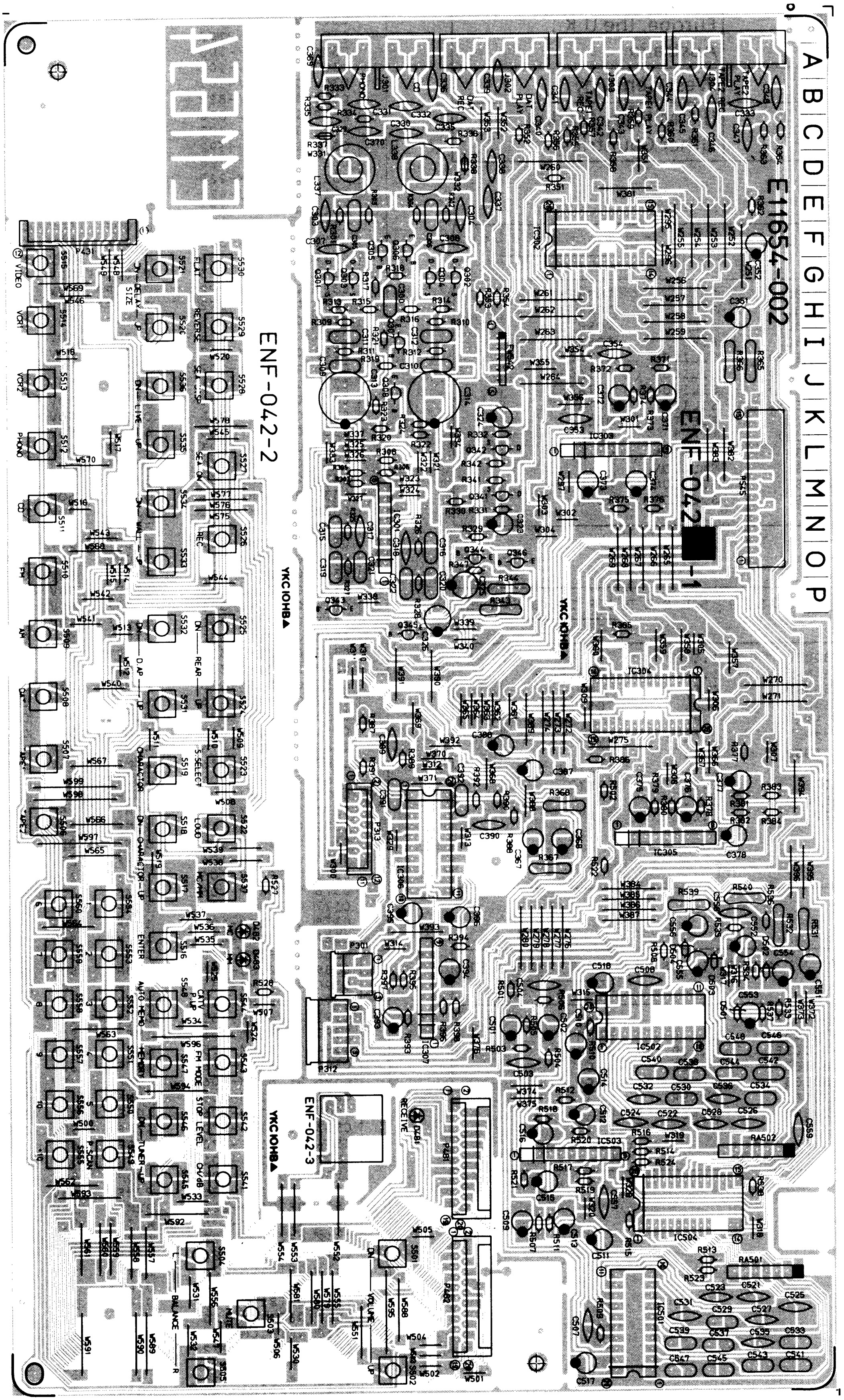
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER TERMINAL	
		EMB90YV-401A	SPEAKER TERMINAL	
		EWH23A-16RR	TWIST PARALLEL WIRE	
		E11611-004	CIRCUIT BOARD	
		E25913-002	HEAT SINK	
		E305205-001	BRACKET	
		E305206-001	BRACKET	
		E65654-001	SPACER	D
		E65654-001	SPACER	E
		E65654-001	SPACER	F
		E67764-102	WRAPPING TERMINAL	
		E67764-102	WRAPPING TERMINAL	
		E70208-001	PLATE	
		E70225-001	EARTH PLATE	F
		E70306-001	HEAT SINK	
		E70859-001	EARTH PLATE	
		E73525-001	SCREW	
		E73525-002	SCREW	
		E74546-001	BRACKET	
		SBSB3008CC	SCREW	
		SBSB3008CC	SCREW	
		SBSB3008CC	SCREW	
		SBSB3008Z	SCREW	
	J901	QMS6A40-021	HEADPHONE JACK	
	L011	EQL0001-R45	INDUCTOR	F
	L012	EQL0001-R45	INDUCTOR	F
	L701	EQL0101-1R2	INDUCTOR	
	L702	EQL0101-1R2	INDUCTOR	
	P791	EWS013-258	SOCKET WIRE	
	P851	EMV7112-004	CONNECTOR	
	P852	EMV7112-003	CONNECTOR	
	P853	EMV7112-005	CONNECTOR	
	P854	EMV7112-006	CONNECTOR	
	P855	EMV7112-008	CONNECTOR	
	S901	QST4231-E04	PUSH SWITCH	
	S902	QST4231-E04	PUSH SWITCH	
⚠	CP851	ICP-N5	I.C. PROTECTOR	D
⚠	CP851	ICP-N5	I.C. PROTECTOR	E
⚠	CP851	ICP-N5	I.C. PROTECTOR	F
	FW301	EWR23C-25JN	FLAT WIRE	
	FW548	EWR33B-50KST	FLAT WIRE	
	FW556	EWR23C-30JN	FLAT WIRE	
	FW801	EWR33B-20SST	FLAT WIRE	
	FW802	EWR37B-20SST	FLAT WIRE	
	FW803	EWR36B-20SST	FLAT WIRE	
	FW804	EWR39B-20SST	FLAT WIRE	
	FW805	EWR33B-20SST	FLAT WIRE	
	FW901	EWR33B-13SST	FLAT WIRE	
	FW902	EWR34B-60SST	FLAT WIRE	
	RY901	ESK5D24-214	RELAY	
	RY941	ESK7D24-211	RELAY	

⚠ : SAFETY PARTS

■ ENF-042 □ Source Select PC Board Ass'y

Note: ENF−042□ Varies according to the areas employed. See note (1) when placing an order.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ENF-042-1
ENF-042-2
ENF-042-3
IC302
IC303
IC304
IC305
IC306
IC501
IC502
IC503
IC504
VIDEO
VCR1
VCR2
PHONO
FM
AM
CD
DAT
TAPE1
TAPE2
REAR
S.SELECT
CHARACTER
ENTER
LOUD
FM MODE
STOP LEVEL
BALANCE
MUTE
VOLUME
RECEIVE
REVERSE
FLAT
SIZE
DELAY
LIVE
REC

Note (1)

PC Board Ass'y	Designated Areas
ENF-042 A	the U.S.A., Canada,
ENF-042 B	Europe, the U.K., Australia
ENF-042 C	West Germany
ENF-042 D	U.S.Military Market, Other Countries

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q301	2SK170(BL)	F.E.T	TOSHIBA	
	Q302	2SK170(BL)	F.E.T	TOSHIBA	
	Q303	2SK170(BL)	F.E.T	TOSHIBA	
	Q304	2SK170(BL)	F.E.T	TOSHIBA	
	Q305	2SD655(E,F)	SILICON	HITACHI	
	Q306	2SD655(E,F)	SILICON	HITACHI	
	Q307	2SD655(E,F)	SILICON	HITACHI	
	Q308	2SD655(E,F)	SILICON	HITACHI	
	Q341	2SK163(L1)	F.E.T	NEC	
	Q342	2SK163(L1)	F.E.T	NEC	
	Q343	DTA114YS	SILICON		
	Q344	DTA114YS	SILICON		
	Q345	DTC144ES	SILICON	ROHM	
	Q346	DTC144ES	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	VC4580LD	I.C.		
	IC302	TC9164N	I.C.	TOSHIBA	
	IC303	NJM4560SD	I.C.		
	IC304	TC9164N	I.C.	TOSHIBA	
	IC305	NJM4558S	I.C.		
	IC306	TC9177P	I.C.	TOSHIBA	
	IC307	NJM4560SD	I.C.		
	IC501	LA3607S	I.C.	SANYO	
	IC502	LA3607S	I.C.	SANYO	
	IC503	NJM4560SD	I.C.		
	IC504	LC7522	I.C.	SANYO	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D481	SLH-34VC3F	L.E.D.	ROHM	
	D482	SLH-34DC3F	L.E.D.	ROHM	
	D483	SLH-34DC3F	L.E.D.	ROHM	
	D501	RD6.8JSB3	ZENER	NEC	
	D502	RD6.8JSB3	ZENER	NEC	
	D503	RD8.2JSB3	ZENER		
	D504	RD8.2JSB3	ZENER		

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C300	QFN81HJ-104	0.1MF	50V	MYLAR	
	C303	QCS21HJ-331	330PF	50V	CERAMIC	
	C304	QCS21HJ-331	330PF	50V	CERAMIC	
	C305	QFN81HJ-103	0.01MF	50V	MYLAR	
	C306	QFN81HJ-103	0.01MF	50V	MYLAR	
	C307	QCS21HJ-101	100PF	50V	CERAMIC	
	C308	QCS21HJ-101	100PF	50V	CERAMIC	
	C309	QFN81HJ-822	8200PF	50V	MYLAR	
	C310	QFN81HJ-822	8200PF	50V	MYLAR	
	C311	QFN81HJ-392	3900PF	50V	MYLAR	
	C312	QFN81HJ-392	3900PF	50V	MYLAR	
	C313	QETB0JM-228	2200MF	6.3V	ELECTRO	
	C314	QETB0JM-228	2200MF	6.3V	ELECTRO	
	C315	QFN81HJ-472	4700PF	50V	MYLAR	
	C316	QFN81HJ-472	4700PF	50V	MYLAR	
	C317	QCS21HJ-331	330PF	50V	CERAMIC	
	C318	QCS21HJ-331	330PF	50V	CERAMIC	
	C319	QFN81HJ-153	0.015MF	50V	MYLAR	
	C320	QFN81HJ-153	0.015MF	50V	MYLAR	
	C321	QFN81HJ-272	2700PF	50V	MYLAR	
	C322	QFN81HJ-272	2700PF	50V	MYLAR	
	C323	QETB1HM-475	4.7MF	50V	ELECTRO	
	C324	QETB1HM-475	4.7MF	50V	ELECTRO	
	C325	QETB1EM-107	100MF	25V	ELECTRO	
	C326	QETB1EM-107	100MF	25V	ELECTRO	
	C329	QCS21HJ-151	150PF	50V	CERAMIC	
	C330	QCS21HJ-151	150PF	50V	CERAMIC	
	C331	QCF21HP-223	0.022MF	50V	CERAMIC	
	C332	QCF21HP-223	0.022MF	50V	CERAMIC	
	C333	QCF21HP-223	0.022MF	50V	CERAMIC	
	C335	QCS21HJ-331	330PF	50V	CERAMIC	C
	C336	QCS21HJ-331	330PF	50V	CERAMIC	C
	C337	QCS21HJ-331	330PF	50V	CERAMIC	C
	C338	QCS21HJ-331	330PF	50V	CERAMIC	C
	C339	QCS21HJ-331	330PF	50V	CERAMIC	C
	C340	QCS21HJ-331	330PF	50V	CERAMIC	C
	C341	QCS21HJ-331	330PF	50V	CERAMIC	C
	C342	QCS21HJ-331	330PF	50V	CERAMIC	C
	C343	QCS21HJ-331	330PF	50V	CERAMIC	C
	C344	QCS21HJ-331	330PF	50V	CERAMIC	C
	C345	QCS21HJ-331	330PF	50V	CERAMIC	C
	C346	QCS21HJ-331	330PF	50V	CERAMIC	C
	C347	QCS21HJ-331	330PF	50V	CERAMIC	C
	C348	QCS21HJ-331	330PF	50V	CERAMIC	C
	C351	QETB1EM-476	47MF	25V	ELECTRO	
	C352	QETB1EM-476	47MF	25V	ELECTRO	
	C353	QCF21HP-223	0.022MF	50V	CERAMIC	
	C354	QCF21HP-223	0.022MF	50V	CERAMIC	
	C367	QETB1EM-476	47MF	25V	ELECTRO	
	C368	QETB1EM-476	47MF	25V	ELECTRO	
	C369	QCS21HJ-101	100PF	50V	CERAMIC	C
	C370	QCS21HJ-101	100PF	50V	CERAMIC	C
	C371	QETB1EM-106	10MF	25V	ELECTRO	
	C372	QETB1EM-106	10MF	25V	ELECTRO	
	C373	QETB1EM-106	10MF	25V	ELECTRO	
	C374	QETB1EM-106	10MF	25V	ELECTRO	
	C375	QETB1EM-106	10MF	25V	ELECTRO	
	C376	QETB1EM-106	10MF	25V	ELECTRO	
	C377	QETB1EM-106	10MF	25V	ELECTRO	
	C378	QETB1EM-106	10MF	25V	ELECTRO	
	C387	QETB1HM-475	4.7MF	50V	ELECTRO	
	C388	QETB1HM-475	4.7MF	50V	ELECTRO	
	C389	QCS21HJ-181	180PF	50V	CERAMIC	
	C390	QCS21HJ-181	180PF	50V	CERAMIC	
	C391	QFN81HK-333	0.033MF	50V	MYLAR	
	C392	QFN81HK-333	0.033MF	50V	MYLAR	
	C393	QETB1HM-105	1MF	50V	ELECTRO	
	C394	QETB1HM-105	1MF	50V	ELECTRO	
	C395	QETB1EM-106	10MF	25V	ELECTRO	
	C396	QETB1EM-106	10MF	25V	ELECTRO	
	C501	QETB1EM-106	10MF	25V	ELECTRO	
	C502	QETB1EM-106	10MF	25V	ELECTRO	
	C503	QCS21HJ-470	47PF	50V	CERAMIC	
	C504	QCS21HJ-470	47PF	50V	CERAMIC	
	C507	QCS21HJ-101	100PF	50V	CERAMIC	
	C508	QCS21HJ-101	100PF	50V	CERAMIC	
	C509	QETB1CM-226	22MF	16V	ELECTRO	
	C510	QETB1CM-226	22MF	16V	ELECTRO	
	C511	QETB1HM-475	4.7MF	50V	ELECTRO	
	C512	QETB1HM-475	4.7MF	50V	ELECTRO	
	C513	QETB1CM-226	22MF	16V	ELECTRO	
	C514	QETB1CM-226	22MF	16V	ELECTRO	
	C515	QETB1HM-474	0.47MF	50V	ELECTRO	
	C516	QETB1HM-474	0.47MF	50V	ELECTRO	
	C517	QETB1CM-226	22MF	16V	ELECTRO	
	C518	QETB1CM-226	22MF	16V	ELECTRO	
	C521	QCY21HK-272	2700PF	50V	CERAMIC	
	C522	QCY21HK-272	2700PF	50V	CERAMIC	
	C523	QCS21HJ-471	470PF	50V	CERAMIC	
	C524	QCS21HJ-471	470PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C525	QCY21HK-682	6800PF	50V	CERAMIC	
	C526	QCY21HK-682	6800PF	50V	CERAMIC	
	C527	QCY21HK-122	1200PF	50V	CERAMIC	
	C528	QCY21HK-122	1200PF	50V	CERAMIC	
	C529	QFN81HK-183	0.018MF	50V	MYLAR	
	C530	QFN81HK-183	0.018MF	50V	MYLAR	
	C531	QCY21HK-272	2700PF	50V	CERAMIC	
	C532	QCY21HK-272	2700PF	50V	CERAMIC	
	C533	QFN81HK-473	0.047MF	50V	MYLAR	
	C534	QFN81HK-473	0.047MF	50V	MYLAR	
	C535	QCY21HK-682	6800PF	50V	CERAMIC	
	C536	QCY21HK-682	6800PF	50V	CERAMIC	
	C537	QFN81HK-104	0.1MF	50V	MYLAR	
	C538	QFN81HK-104	0.1MF	50V	MYLAR	
	C539	QFN81HK-183	0.018MF	50V	MYLAR	
	C540	QFN81HK-183	0.018MF	50V	MYLAR	
	C541	QFV81HJ-274	0.27MF	50V	T.FILM	
	C542	QFV81HJ-274	0.27MF	50V	T.FILM	
	C543	QFN81HK-473	0.047MF	50V	MYLAR	
	C544	QFN81HK-473	0.047MF	50V	MYLAR	
	C545	QFV81HJ-684	0.68MF	50V	T.FILM	
	C546	QFV81HJ-684	0.68MF	50V	T.FILM	
	C547	QFN81HK-124	0.12MF	50V	MYLAR	
	C548	QFN81HK-124	0.12MF	50V	MYLAR	
	C551	QETB1HM-475	4.7MF	50V	ELECTRO	
	C552	QETB1HM-475	4.7MF	50V	ELECTRO	
	C553	QETB1HM-475	4.7MF	50V	ELECTRO	
	C554	QETB1HM-475	4.7MF	50V	ELECTRO	
	C555	QETB1HM-475	4.7MF	50V	ELECTRO	
	C556	QETB1HM-475	4.7MF	50V	ELECTRO	
	C557	QCF21HP-223	0.022MF	50V	CERAMIC	
	C558	QCF21HP-223	0.022MF	50V	CERAMIC	
	C559	QCF21HP-223	0.022MF	50V	CERAMIC	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-5R6	5.6	1/6W	CARBON	
	R302	QRD167J-5R6	5.6	1/6W	CARBON	
	R303	QRD167J-101	100	1/6W	CARBON	
	R304	QRD167J-101	100	1/6W	CARBON	
	R305	QRD167J-562	5.6K	1/6W	CARBON	
	R306	QRD167J-562	5.6K	1/6W	CARBON	
	R307	QRD167J-562	5.6K	1/6W	CARBON	
	R308	QRD167J-562	5.6K	1/6W	CARBON	
	R309	QRD167J-270	27	1/6W	CARBON	
	R310	QRD167J-270	27	1/6W	CARBON	
	R311	QRD167J-561	560	1/6W	CARBON	
	R312	QRD167J-561	560	1/6W	CARBON	
	R313	QRD167J-222	2.2K	1/6W	CARBON	
	R314	QRD167J-222	2.2K	1/6W	CARBON	
	R315	QRD167J-272	2.7K	1/6W	CARBON	
	R316	QRD167J-272	2.7K	1/6W	CARBON	
	R317	QRD167J-273	27K	1/6W	CARBON	
	R318	QRD167J-273	27K	1/6W	CARBON	
	R319	QRD167J-273	27K	1/6W	CARBON	
	R320	QRD167J-273	27K	1/6W	CARBON	
	R321	QRD167J-181	180	1/6W	CARBON	
	R322	QRD167J-181	180	1/6W	CARBON	
	R323	QRD167J-200	20	1/6W	CARBON	
	R324	QRD167J-200	20	1/6W	CARBON	
	R325	QRD167J-153	15K	1/6W	CARBON	
	R326	QRD167J-153	15K	1/6W	CARBON	
	R327	QRD167J-184	180K	1/6W	CARBON	
	R328	QRD167J-184	180K	1/6W	CARBON	
	R329	QRD167J-331	330	1/6W	CARBON	
	R330	QRD167J-331	330	1/6W	CARBON	
	R331	QRD167J-104	100K	1/6W	CARBON	
	R332	QRD167J-104	100K	1/6W	CARBON	
	R333	QRD167J-473	47K	1/6W	CARBON	
	R334	QRD167J-473	47K	1/6W	CARBON	
	R335	QRD167J-471	470	1/6W	CARBON	
	R336	QRD167J-471	470	1/6W	CARBON	
	R337	QRD167J-152	1.5K	1/6W	CARBON	
	R338	QRD167J-152	1.5K	1/6W	CARBON	
	R341	QRD167J-473	47K	1/6W	CARBON	
	R342	QRD167J-473	47K	1/6W	CARBON	
⚠	R343	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R343	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R343	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R343	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R344	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R344	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R344	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R344	QRZ0077-680	68	1/4W	FUSIBLE	C
	R347	QRD167J-104	100K	1/6W	CARBON	
	R351	QRD167J-221	220	1/6W	CARBON	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R352	QRD167J-221	220	1/6W	CARBON	
	R353	QRD167J-221	220	1/6W	CARBON	
	R354	QRD167J-221	220	1/6W	CARBON	
	R355	QRD167J-221	220	1/6W	CARBON	
	R356	QRD167J-221	220	1/6W	CARBON	
	R357	QRD167J-221	220	1/6W	CARBON	
	R358	QRD167J-221	220	1/6W	CARBON	
	R359	QRD167J-221	220	1/6W	CARBON	
	R360	QRD167J-221	220	1/6W	CARBON	
	R361	QRD167J-221	220	1/6W	CARBON	
	R362	QRD167J-221	220	1/6W	CARBON	
	R363	QRD167J-221	220	1/6W	CARBON	
	R364	QRD167J-221	220	1/6W	CARBON	
⚠	R365	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R365	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R365	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R365	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R366	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R366	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R366	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R366	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R367	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R367	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R367	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R367	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R368	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R368	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R368	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R368	QRZ0077-680	68	1/4W	FUSIBLE	C
	R371	QRD167J-683	68K	1/6W	CARBON	
	R372	QRD167J-683	68K	1/6W	CARBON	
	R373	QRD167J-154	150K	1/6W	CARBON	
	R374	QRD167J-154	150K	1/6W	CARBON	
	R375	QRD167J-104	100K	1/6W	CARBON	
	R376	QRD167J-104	100K	1/6W	CARBON	
	R377	QRD167J-683	68K	1/6W	CARBON	
	R378	QRD167J-683	68K	1/6W	CARBON	
	R379	QRD167J-154	150K	1/6W	CARBON	
	R380	QRD167J-154	150K	1/6W	CARBON	
	R381	QRD167J-104	100K	1/6W	CARBON	
	R382	QRD167J-104	100K	1/6W	CARBON	
	R383	QRD167J-222	2.2K	1/6W	CARBON	
	R384	QRD167J-222	2.2K	1/6W	CARBON	
	R385	QRD167J-104	100K	1/6W	CARBON	
	R386	QRD167J-104	100K	1/6W	CARBON	
	R387	QRD167J-563	56K	1/6W	CARBON	
	R388	QRD167J-563	56K	1/6W	CARBON	
	R389	QRD167J-105	1M	1/6W	CARBON	
	R390	QRD167J-105	1M	1/6W	CARBON	
	R391	QRD167J-563	56K	1/6W	CARBON	
	R392	QRD167J-563	56K	1/6W	CARBON	
	R393	QRD167J-105	1M	1/6W	CARBON	
	R394	QRD167J-105	1M	1/6W	CARBON	
	R395	QRD167J-113	11K	1/6W	CARBON	
	R396	QRD167J-113	11K	1/6W	CARBON	
	R397	QRD167J-103	10K	1/6W	CARBON	
	R398	QRD167J-103	10K	1/6W	CARBON	
	R501	QRD167J-153	15K	1/6W	CARBON	
	R502	QRD167J-153	15K	1/6W	CARBON	
	R503	QRD167J-104	100K	1/6W	CARBON	
	R504	QRD167J-104	100K	1/6W	CARBON	
	R505	QRD167J-823	82K	1/6W	CARBON	
	R506	QRD167J-823	82K	1/6W	CARBON	
	R507	QRD167J-101	100	1/6W	CARBON	
	R508	QRD167J-101	100	1/6W	CARBON	
	R509	QRD167J-103	10K	1/6W	CARBON	
	R510	QRD167J-103	10K	1/6W	CARBON	
	R511	QRD167J-103	10K	1/6W	CARBON	
	R512	QRD167J-103	10K	1/6W	CARBON	
	R513	QRD167J-224	220K	1/6W	CARBON	
	R514	QRD167J-224	220K	1/6W	CARBON	
	R515	QRD167J-224	220K	1/6W	CARBON	
	R516	QRD167J-224	220K	1/6W	CARBON	
	R517	QRD167J-223	22K	1/6W	CARBON	
	R518	QRD167J-223	22K	1/6W	CARBON	
	R519	QRD167J-333	33K	1/6W	CARBON	
	R520	QRD167J-333	33K	1/6W	CARBON	
	R521	QRD167J-104	100K	1/6W	CARBON	
	R522	QRD167J-104	100K	1/6W	CARBON	
	R523	QRD167J-474	470K	1/6W	CARBON	
	R524	QRD167J-474	470K	1/6W	CARBON	
	R527	QRD167J-221	220	1/6W	CARBON	
	R528	QRD167J-221	220	1/6W	CARBON	
⚠	R531	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R531	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R531	QRZ0077-680	68	1/4W	FUSIBLE	B
⚠	R531	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R532	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R532	QRD14CJ-680S	68	1/4W	UNF.CARBON	D
⚠	R532	QRZ0077-680	68	1/4W	FUSIBLE	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R532	QRZ0077-680	68 1/4W FUSIBLE	C
	R533	QRD167J-821	820 1/6W CARBON	
	R534	QRD167J-821	820 1/6W CARBON	
	R535	QRD167J-151	150 1/6W CARBON	
	R536	QRD167J-181	180 1/6W CARBON	
	R537	QRD167J-681	680 1/6W CARBON	
	R538	QRD167J-272	2.7K 1/6W CARBON	
	RA501	QRB065J-474	470K 1/8W R.NETWORK	
	RA502	QRB065J-474	470K 1/8W R.NETWORK	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		A1GH3021H0	I.C.(M)	
		E03532-001	SHIELD CASE	A
		E03532-001	SHIELD CASE	B
		E03532-001	SHIELD CASE	C
		E03532-001	SHIELD CASE	D
		E11654-002	CIRCUIT BOARD	A
		E11654-002	CIRCUIT BOARD	B
		E11654-002	CIRCUIT BOARD	C
		E11654-002	CIRCUIT BOARD	D
	J301	EMN00TV-405A	4P PIN JACK	
	J302	EMN00TV-402A	4P PIN JACK	
	J303	EMN00TV-402A	4P PIN JACK	
	J304	EMN00TV-405A	4P PIN JACK	
	L337	EQL0111-391	INDUCTOR	
	L338	EQL0111-391	INDUCTOR	
	P301	EMV7112-003R	CONNECTOR	
	P312	EMV7112-005R	CONNECTOR	
	P313	EMV5128-012	PLUG ASSY	
	P431	EMV7120-012	CONNECTOR	
	P481	EMV7128-020	CONNECTOR	
	P482	EMV7128-020	CONNECTOR	
	P545	EMV7125-015R	CONNECTOR	
	S501	ESP0001-018	TACT SWITCH	
	S502	ESP0001-018	TACT SWITCH	
	S503	ESP0001-018	TACT SWITCH	
	S504	ESP0001-018	TACT SWITCH	
	S505	ESP0001-018	TACT SWITCH	
	S506	ESP0001-018	TACT SWITCH	
	S507	ESP0001-018	TACT SWITCH	
	S508	ESP0001-018	TACT SWITCH	
	S509	ESP0001-018	TACT SWITCH	
	S510	ESP0001-018	TACT SWITCH	
	S511	ESP0001-018	TACT SWITCH	
	S512	ESP0001-018	TACT SWITCH	
	S513	ESP0001-018	TACT SWITCH	

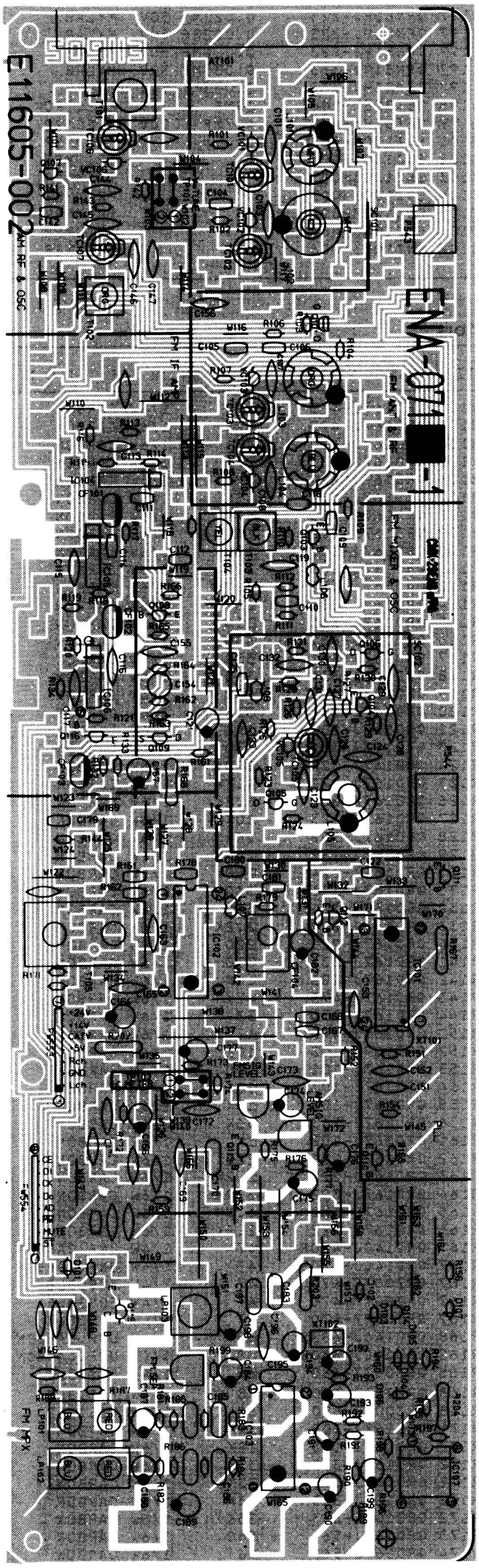
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	S514	ESP0001-018	TACT SWITCH	
	S515	ESP0001-018	TACT SWITCH	
	S516	ESP0001-018	TACT SWITCH	
	S517	ESP0001-018	TACT SWITCH	
	S518	ESP0001-018	TACT SWITCH	
	S519	ESP0001-018	TACT SWITCH	
	S520	ESP0001-018	TACT SWITCH	
	S521	ESP0001-018	TACT SWITCH	
	S522	ESP0001-018	TACT SWITCH	
	S523	ESP0001-018	TACT SWITCH	
	S524	ESP0001-018	TACT SWITCH	
	S525	ESP0001-018	TACT SWITCH	
	S526	ESP0001-018	TACT SWITCH	
	S527	ESP0001-018	TACT SWITCH	
	S528	ESP0001-018	TACT SWITCH	
	S529	ESP0001-018	TACT SWITCH	
	S530	ESP0001-018	TACT SWITCH	
	S531	ESP0001-018	TACT SWITCH	
	S532	ESP0001-018	TACT SWITCH	
	S533	ESP0001-018	TACT SWITCH	
	S534	ESP0001-018	TACT SWITCH	
	S535	ESP0001-018	TACT SWITCH	
	S536	ESP0001-018	TACT SWITCH	
	S537	ESP0001-018	TACT SWITCH	
	S541	ESP0001-020	TACT SWITCH	
	S542	ESP0001-020	TACT SWITCH	
	S543	ESP0001-020	TACT SWITCH	
	S544	ESP0001-020	TACT SWITCH	
	S545	ESP0001-020	TACT SWITCH	
	S546	ESP0001-020	TACT SWITCH	
	S547	ESP0001-020	TACT SWITCH	
	S548	ESP0001-020	TACT SWITCH	
	S549	ESP0001-020	TACT SWITCH	
	S550	ESP0001-020	TACT SWITCH	
	S551	ESP0001-020	TACT SWITCH	
	S552	ESP0001-020	TACT SWITCH	
	S553	ESP0001-020	TACT SWITCH	
	S554	ESP0001-020	TACT SWITCH	
	S555	ESP0001-020	TACT SWITCH	
	S556	ESP0001-020	TACT SWITCH	
	S557	ESP0001-020	TACT SWITCH	
	S558	ESP0001-020	TACT SWITCH	
	S559	ESP0001-020	TACT SWITCH	
	S560	ESP0001-020	TACT SWITCH	
	FW542	EWR35B-13KST	FLAT WIRE	

⚠ : SAFETY PARTS

■ ENA-071 ☐ Tuner PC Board Ass'y

Note: ENA-071☐ Varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENA-071 Ⓐ	the U.S.A., Canada,
ENA-071 Ⓑ	U.S.Military Market, Other Countries
ENA-071 Ⓒ	the U.K., Australia
ENA-071 Ⓓ	West Germany
ENA-071 Ⓔ	Europe

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q101	2SK241(Y,GR)	F.E.T	TOSHIBA	
	Q103	2SC535(C)	SILICON		
	Q104	2SC461(C)	SILICON		
	Q105	2SK606(Q,R)	F.E.T	MATSUSHITA	
	Q106	2SK606(Q,R)	F.E.T	MATSUSHITA	
	Q107	2SK301(Q)	F.E.T	MATSUSHITA	
	Q108	2SC1685(R,S)	SILICON		
	Q109	2SK301(Q2)	F.E.T	MATSUSHITA	
	Q110	2SC1685(R,S)	SILICON		A
	Q111	DTA114YS	SILICON		
	Q112	DTA114YS	SILICON		
	Q113	DTC114YS	SILICON	ROHM	
	Q114	DTC114YS	SILICON	ROHM	
	Q115	DTC114YS	SILICON	ROHM	
	Q116	2SC461(C)	SILICON		

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC101	LC7217	I.C.	SANYO	
	IC102	LA1266A	I.C.	SANYO	
	IC103	LA3401	I.C.	SANYO	
	IC104	BA401	I.C.	ROHM	
	IC105	BA401	I.C.	ROHM	
	IC106	BA401	I.C.	ROHM	
	IC107	AN1358	I.C.	MATSUSHITA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D101	1SS133	SILICON	ROHM	
	D103	1SS133	SILICON	ROHM	
	D104	1SS133	SILICON	ROHM	
	D105	1SS133	SILICON	ROHM	
	D106	1SS133	SILICON	ROHM	
	D107	1SS133	SILICON	ROHM	
	VC101	KV1320	VARICAP	TOKO	
	VC102	KV1320	VARICAP	TOKO	
	VC103	KV1320	VARICAP	TOKO	
	VC104	KV1320	VARICAP	TOKO	
	VC105	KV1320	VARICAP	TOKO	
	VC106	SVC342(L)	VARICAP	SANYO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCS21HJ-7R0	7PF	50V	CERAMIC	
	C101	QCS21HJ-8R0	8PF	50V	CERAMIC	D
	C101	QCS21HJ-8R0	8PF	50V	CERAMIC	E
	C103	QCS21HJ-3R0	3PF	50V	CERAMIC	
	C104	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C105	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C106	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C107	QCS21HJ-2R0	2PF	50V	CERAMIC	
	C108	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C109	QCT30CH-3R3	3.3PF	50V	CERAMIC	
	C110	QCBB1HK-151	150PF	50V	CERAMIC	
	C111	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C112	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C113	QCF21HP-223	0.022MF	50V	CERAMIC	
	C114	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C115	QCF21HP-223	0.022MF	50V	CERAMIC	
	C116	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C117	QCF21HP-223	0.022MF	50V	CERAMIC	
	C118	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C119	QCF21HP-103	0.01MF	50V	CERAMIC	
	C121	QETB1EM-226	22MF	25V	ELECTRO	
	C122	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C123	QCT26CH-2R0	2PF	50V	CERAMIC	
	C124	QCT26TH-7R0	7PF	50V	CERAMIC	
	C125	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C126	QCT26CH-7R0	7PF	50V	CERAMIC	
	C127	QCT26CH-220	22PF	50V	CERAMIC	
	C128	QCT26CH-120	12PF	50V	CERAMIC	
	C129	QCT26CH-3R0	3PF	50V	CERAMIC	
	C130	QCT26CH-5R0	5PF	50V	CERAMIC	
	C131	QCF21HP-103	0.01MF	50V	CERAMIC	
	C132	QCF21HP-103	0.01MF	50V	CERAMIC	
	C133	QCF21HP-103	0.01MF	50V	CERAMIC	
	C142	QCBB1HK-561	560PF	50V	CERAMIC	
	C144	QCC21EM-473	0.047MF	25V	CERAMIC	
	C145	QCT26CH-8R0	8PF	50V	CERAMIC	
	C146	QCT26CH-221	220PF	50V	CERAMIC	
	C147	QCT26CH-241	240PF	50V	CERAMIC	
	C151	QCS21HJ-270	27PF	50V	CERAMIC	
	C152	QCS21HJ-270	27PF	50V	CERAMIC	
	C153	QCC21EM-473	0.047MF	25V	CERAMIC	
	C154	QEN51HM-105	1MF	50V	NON POLE	
	C155	QCF21HP-102	1000PF	50V	CERAMIC	
	C156	QCF21HP-223	0.022MF	50V	CERAMIC	
	C157	QETB1VM-227	220MF	35V	ELECTRO	
	C161	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C162	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C163	QCC21EM-223	0.022MF	25V	CERAMIC	
	C164	QETB1EM-226	22MF	25V	ELECTRO	
	C165	QCF21HP-223	0.022MF	50V	CERAMIC	
	C166	QETB1HM-474	0.47MF	50V	ELECTRO	
	C167	QCBB1HK-101	100PF	50V	CERAMIC	
	C168	QCBB1HK-101	100PF	50V	CERAMIC	
	C169	QCS21HJ-101	100PF	50V	CERAMIC	C
	C169	QCS21HJ-101	100PF	50V	CERAMIC	D
	C169	QCS21HJ-101	100PF	50V	CERAMIC	E
	C169	QCS21HJ-221	220PF	50V	CERAMIC	A
	C169	QCS21HJ-221	220PF	50V	CERAMIC	B
	C170	QFN81HJ-152	1500PF	50V	MYLAR	
	C171	QCF21HP-223	0.022MF	50V	CERAMIC	
	C172	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C173	QCF21HP-223	0.022MF	50V	CERAMIC	
	C174	QETB1HM-225	2.2MF	50V	ELECTRO	
	C175	QETB1HM-225	2.2MF	50V	ELECTRO	
	C176	QETB1HM-475	4.7MF	50V	ELECTRO	
	C177	QETB1EM-106	10MF	25V	ELECTRO	
	C178	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C179	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C180	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C181	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C182	QETB1EM-106	10MF	25V	ELECTRO	
	C183	QFN81HJ-332	3300PF	50V	MYLAR	
	C184	QETB1EM-106	10MF	25V	ELECTRO	
	C185	QFP81HJ-221	220PF	50V	POLY	C
	C185	QFP81HJ-221	220PF	50V	POLY	D
	C185	QFP81HJ-221	220PF	50V	POLY	E
	C185	QFP81HJ-561	560PF	50V	POLY	A
	C185	QFP81HJ-561	560PF	50V	POLY	B
	C186	QFP81HJ-221	220PF	50V	POLY	C
	C186	QFP81HJ-221	220PF	50V	POLY	D
	C186	QFP81HJ-221	220PF	50V	POLY	E
	C186	QFP81HJ-561	560PF	50V	POLY	A
	C186	QFP81HJ-561	560PF	50V	POLY	B
	C187	QETB1HM-225	2.2MF	50V	ELECTRO	
	C188	QETB1HM-225	2.2MF	50V	ELECTRO	
	C189	QETB1HM-225	2.2MF	50V	ELECTRO	
	C190	QETB1HM-105	1MF	50V	ELECTRO	
	C191	QETB1HM-105	1MF	50V	ELECTRO	
	C192	QETB1HM-474	0.47MF	50V	ELECTRO	
	C193	QETB1HM-225	2.2MF	50V	ELECTRO	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C194	QETB1EM-226	22MF	25V	ELECTRO	
	C195	QFN81HJ-473	0.047MF	50V	MYLAR	
	C196	QCF21HP-102	1000PF	50V	CERAMIC	
	C197	QFN81HJ-223	0.022MF	50V	MYLAR	C
	C197	QFN81HJ-223	0.022MF	50V	MYLAR	D
	C197	QFN81HJ-223	0.022MF	50V	MYLAR	E
	C197	QFN81HJ-333	0.033MF	50V	MYLAR	A
	C197	QFN81HJ-333	0.033MF	50V	MYLAR	B
	C198	QETB1EM-106	10MF	25V	ELECTRO	
	C199	QETB1HM-475	4.7MF	50V	ELECTRO	
	TC101	ENZ1003-003			TRIMMER	
	TC102	ENZ1003-003			TRIMMER	
	TC103	ENZ1003-003			TRIMMER	
	TC104	ENZ1003-003			TRIMMER	
	TC105	ENZ1003-003			TRIMMER	
	TC106	ENZ1003-006			TRIMMER	
	TC107	ENZ1003-006			TRIMMER	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD167J-473	47K	1/6W	CARBON	
	R102	QRD167J-473	47K	1/6W	CARBON	
	R104	QRD167J-470	47	1/6W	CARBON	
	R105	QRD167J-221	220	1/6W	CARBON	
	R106	QRD167J-221	220	1/6W	CARBON	
	R107	QRD167J-473	47K	1/6W	CARBON	
	R108	QRD167J-473	47K	1/6W	CARBON	
	R109	QRD167J-102	1K	1/6W	CARBON	
	R110	QRD167J-101	100	1/6W	CARBON	
	R111	QRD167J-223	22K	1/6W	CARBON	
	R112	QRD167J-472	4.7K	1/6W	CARBON	
	R114	QRD167J-681	680	1/6W	CARBON	
	R115	QRD167J-331	330	1/6W	CARBON	
	R116	QRD167J-681	680	1/6W	CARBON	
	R117	QRD167J-331	330	1/6W	CARBON	
	R118	QRD167J-331	330	1/6W	CARBON	
	R119	QRD167J-681	680	1/6W	CARBON	
	R120	QRD167J-331	330	1/6W	CARBON	
	R121	QRD167J-102	1K	1/6W	CARBON	
	R123	QRD167J-331	330	1/6W	CARBON	
	R124	QRD167J-224	220K	1/6W	CARBON	
	R125	QRD167J-472	4.7K	1/6W	CARBON	
	R126	QRD167J-682	6.8K	1/6W	CARBON	
	R127	QRD167J-103	10K	1/6W	CARBON	
	R128	QRD167J-102	1K	1/6W	CARBON	
	R129	QRD167J-152	1.5K	1/6W	CARBON	
	R130	QRD167J-224	220K	1/6W	CARBON	
	R131	QRD167J-331	330	1/6W	CARBON	
	R132	QRD167J-331	330	1/6W	CARBON	
	R133	QRD167J-222	2.2K	1/6W	CARBON	
	R134	QRD167J-221	220	1/6W	CARBON	
	R141	QRD167J-331	330	1/6W	CARBON	
	R142	QRD167J-103	10K	1/6W	CARBON	
	R143	QRD167J-473	47K	1/6W	CARBON	
	R144	QRD167J-330	33	1/6W	CARBON	
	R151	QRD167J-473	47K	1/6W	CARBON	
	R152	QRD167J-103	10K	1/6W	CARBON	
	R153	QRD167J-101	100	1/6W	CARBON	A
	R154	QRD167J-103	10K	1/6W	CARBON	A
	R155	QRD167J-103	10K	1/6W	CARBON	A
	R156	QRD167J-563	56K	1/6W	CARBON	
	R161	QRD167J-102	1K	1/6W	CARBON	
	R162	QRD167J-221	220	1/6W	CARBON	
	R163	QRD167J-222	2.2K	1/6W	CARBON	
	R164	QRD167J-392	3.9K	1/6W	CARBON	
	R165	QRD167J-682	6.8K	1/6W	CARBON	
	R166	QRD167J-222	2.2K	1/6W	CARBON	
⚠	R167	QRD14CJ-470S	47	1/4W	UNF.CARBON	A
⚠	R167	QRD14CJ-470S	47	1/4W	UNF.CARBON	B
⚠	R167	QRZ0077-470	47	1/4W	FUSIBLE	C
⚠	R167	QRZ0077-470	47	1/4W	FUSIBLE	D
⚠	R167	QRZ0077-470	47	1/4W	FUSIBLE	E
⚠	R168	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R168	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R168	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R168	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R168	QRZ0077-680	68	1/4W	FUSIBLE	E
	R171	QRD167J-302	3K	1/6W	CARBON	
	R172	QRD167J-183	18K	1/6W	CARBON	A
	R172	QRD167J-333	33K	1/6W	CARBON	B
	R172	QRD167J-333	33K	1/6W	CARBON	C
	R172	QRD167J-333	33K	1/6W	CARBON	D
	R172	QRD167J-333	33K	1/6W	CARBON	E
	R173	QRD167J-561	560	1/6W	CARBON	
	R174	QRD167J-560	56	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R175	QRD167J-103	10K	1/6W	CARBON	A
	R175	QRD167J-103	10K	1/6W	CARBON	B
	R175	QRD167J-333	33K	1/6W	CARBON	C
	R175	QRD167J-333	33K	1/6W	CARBON	D
	R175	QRD167J-333	33K	1/6W	CARBON	E
	R176	QRD167J-103	10K	1/6W	CARBON	
	R177	QRD167J-103	10K	1/6W	CARBON	
	R179	QRD167J-224	220K	1/6W	CARBON	
	R181	QRD167J-332	3.3K	1/6W	CARBON	
	R182	QRD167J-332	3.3K	1/6W	CARBON	
	R183	QRD167J-134	130K	1/6W	CARBON	A
	R183	QRD167J-134	130K	1/6W	CARBON	B
	R183	QRD167J-224	220K	1/6W	CARBON	C
	R183	QRD167J-224	220K	1/6W	CARBON	D
	R183	QRD167J-224	220K	1/6W	CARBON	E
	R184	QRD167J-134	130K	1/6W	CARBON	A
	R184	QRD167J-134	130K	1/6W	CARBON	B
	R184	QRD167J-224	220K	1/6W	CARBON	C
	R184	QRD167J-224	220K	1/6W	CARBON	D
	R184	QRD167J-224	220K	1/6W	CARBON	E
	R185	QRD167J-184	180K	1/6W	CARBON	A
	R185	QRD167J-184	180K	1/6W	CARBON	B
	R185	QRD167J-224	220K	1/6W	CARBON	C
	R185	QRD167J-224	220K	1/6W	CARBON	D
	R185	QRD167J-224	220K	1/6W	CARBON	E
	R186	QRD167J-184	180K	1/6W	CARBON	A
	R186	QRD167J-184	180K	1/6W	CARBON	B
	R186	QRD167J-224	220K	1/6W	CARBON	C
	R186	QRD167J-224	220K	1/6W	CARBON	D
	R186	QRD167J-224	220K	1/6W	CARBON	E
	R187	QRD167J-682	6.8K	1/6W	CARBON	
	R188	QRD167J-682	6.8K	1/6W	CARBON	
	R189	QRD167J-103	10K	1/6W	CARBON	
	R190	QRD167J-103	10K	1/6W	CARBON	
	R191	QRD167J-103	10K	1/6W	CARBON	
	R192	QRD167J-103	10K	1/6W	CARBON	
	R193	QRD167J-562	5.6K	1/6W	CARBON	
	R194	QRD167J-562	5.6K	1/6W	CARBON	
	R195	QRD167J-562	5.6K	1/6W	CARBON	
	R196	QRD167J-122	1.2K	1/6W	CARBON	
	R197	QRD167J-563	56K	1/6W	CARBON	
	R198	QRD167J-102	1K	1/6W	CARBON	
	R199	QRD167J-103	10K	1/6W	CARBON	
⚠	R202	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R202	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R202	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R202	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R202	QRZ0077-680	68	1/4W	FUSIBLE	E
⚠	R203	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R203	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R203	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R203	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R203	QRZ0077-680	68	1/4W	FUSIBLE	E
⚠	R204	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R204	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R204	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R204	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R204	QRZ0077-680	68	1/4W	FUSIBLE	E
	R205	QRD167J-103	10K	1/6W	CARBON	
	VR101	QVZ3518-223	22K	0.1W	VARIABLE	
	VR102	QVZ3518-473	47K	0.1W	VARIABLE	
	VR103	QVZ3518-104	100K	0.1W	VARIABLE	

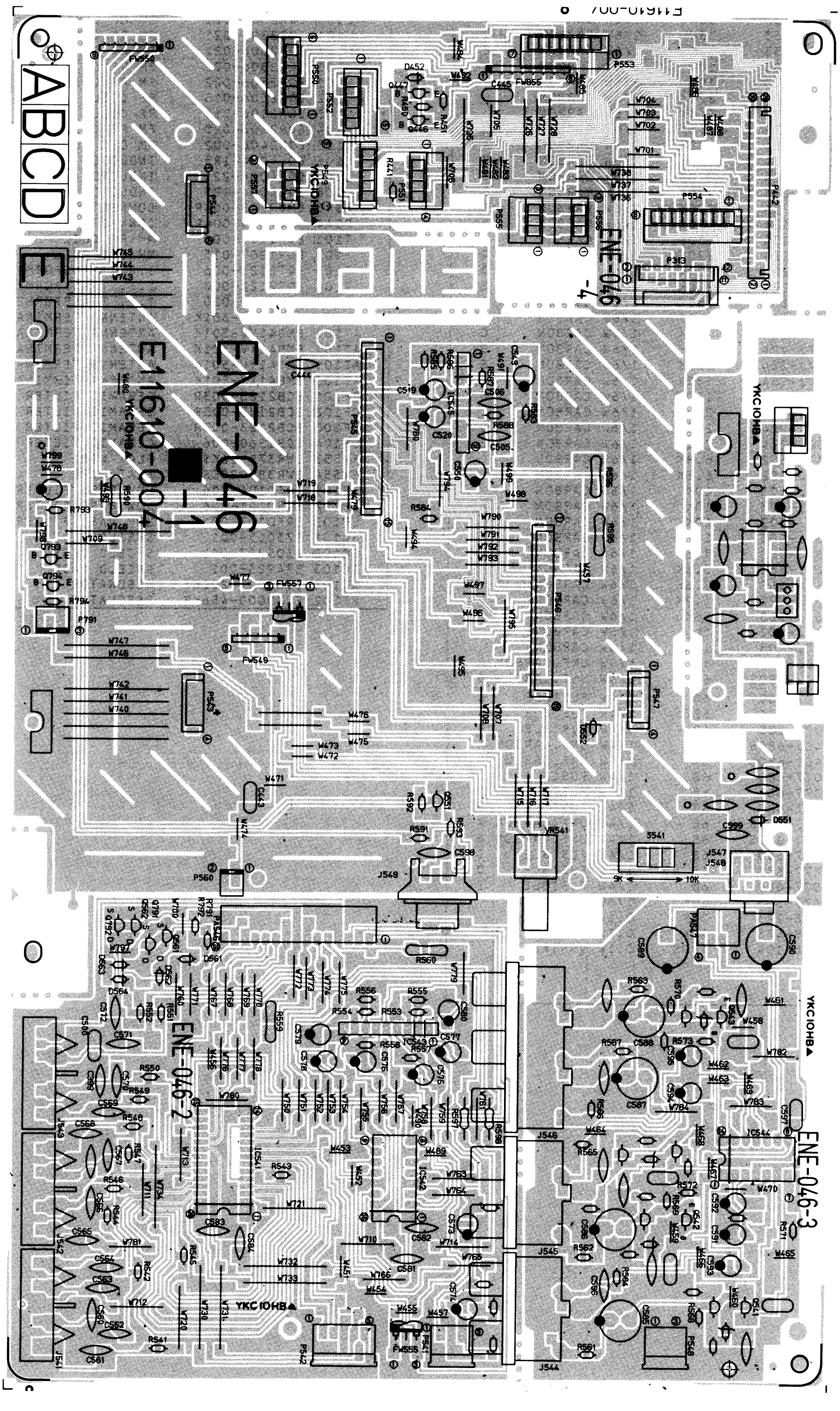
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EWT011-106	TERMINAL WIRE	
		E11605-002	CIRCUIT BOARD	
	L101	EQR2306-021	FM RF COIL	A
	L101	EQR2306-021	FM RF COIL	B
	L101	EQR2306-021	FM RF COIL	C
	L101	EQR2306-022	FM RF COIL	D
	L101	EQR2306-022	FM RF COIL	E
	L102	EQR2106-013	RF COIL	
	L103	EQR2106-015	RF COIL	
	L104	EQR2306-020	FM RF COIL	
	L105	EQR2406-002	FM OSC COIL	
	L106	EQL4004-1R5	INDUCTOR	
	L107	EQL4004-221	INDUCTOR	
	L108	EQL4004-1R5	INDUCTOR	
	P543	EMV7125-004R	CONNECTOR	
	P544	EMV7125-004R	CONNECTOR	
	T101	EQR1111-006	AM RF COIL	
	T102	EQR1207-015	MW OSC COIL	
	T103	EQT2121-006	I.F. TRANSFORMER	
	T104	EQT2121-007	I.F. TRANSFORMER	
	T105	EQT2140-020	I.F. TRANSFORMER	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	D
	AT101	EMB41YV-301K	ANTENNA TERMINAL	E
	AT101	EMB41YV-501K	ANTENNA TERMINAL	A
	AT101	EMB41YV-501K	ANTENNA TERMINAL	B
	AT101	EMB41YV-501K	ANTENNA TERMINAL	C
	CF101	ECB2123-003R	CERAMIC FILTER	
	CF102	ECB2123-003R	CERAMIC FILTER	
	CF103	ECB2123-003R	CERAMIC FILTER	
	CF104	ECB1560-006	CERAMIC FILTER	
	FW553	EWR37B-16KST	FLAT WIRE	
	FW554	EWR38B-20KST	FLAT WIRE	
	LP101	EQF0101-006	LOW PASS FILTER	
	LP102	EQF0101-006	LOW PASS FILTER	
	LP103	EQF0102-001	LOW PASS FILTER	D
	SC101	E73015-001	SHEILD PLATE	
	SC102	E305207-001	SHIELD CASE	
	SC103	E74923-001	SHIELD CASE	
	XT101	ECX0007-200KF	RESONATOR	
	XT102	ECX0000-456KR	RESONATOR	

⚠ : SAFETY PARTS

■ ENE-046 ☐ Signal Control PC Board Ass'y

Note: ENE-046☐ Varies according to the areas employed. See note (1) when placing an order.


ENE-046
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ENE-046-3
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9K
10K

Note (1)

PC Board Ass'y	Designated Areas
ENE-046 🄰	the U.S.A., Canada
ENE-046 🄱	U.S.Military Market, Other Countries
ENE-046 🄲	Europe, Australia, the U.K.
ENE-046 🄳	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q446	DTC144ES	SILICON	ROHM	
	Q447	DTC144ES	SILICON	ROHM	
	Q541	2SC1685(R,S)	SILICON		
	Q542	2SC1685(R,S)	SILICON		
	Q543	2SC1685(R,S)	SILICON		
	Q551	2SC1685(Q,R)	SILICON	MATSUSHITA	A
	Q561	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q562	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q791	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q792	2SK301(P,Q)	F.E.T	MATSUSHITA	
	Q793	DTA144ES	SILICON	ROHM	
	Q794	DTC144ES	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC541	TC9163N	I.C.	TOSHIBA	
	IC542	TC9176P	I.C.	TOSHIBA	
	IC543	NJM4558S	I.C.		
	IC544	LA7951	I.C.	SANYO	
	IC545	NJM4558S	I.C.		

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D452	1SS133	SILICON	ROHM	
	D551	1SS133	SILICON	ROHM	
	D552	MTZ13JC	ZENER	ROHM	C
	D552	MTZ13JC	ZENER	ROHM	D
	D561	1SS133	SILICON	ROHM	
	D562	1SS133	SILICON	ROHM	
	D563	1SS133	SILICON	ROHM	
	D564	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C443	QCZ0205-155	1.5MF	25V	CERAMIC	
	C445	QCZ0205-155	1.5MF	25V	CERAMIC	
	C500	QFN81HK-104	0.1MF	50V	MYLAR	
	C505	QCF21HP-223	0.022MF	50V	CERAMIC	
	C506	QCF21HP-223	0.022MF	50V	CERAMIC	
	C519	QETB1HM-105	1MF	50V	ELECTRO	
	C520	QETB1HM-105	1MF	50V	ELECTRO	
	C549	QETB1EM-106	10MF	25V	ELECTRO	
	C550	QETB1EM-106	10MF	25V	ELECTRO	
	C560	QCF21HP-223	0.022MF	50V	CERAMIC	
	C561	QCS21HJ-221	220PF	50V	CERAMIC	D
	C562	QCS21HJ-221	220PF	50V	CERAMIC	D
	C563	QCS21HJ-331	330PF	50V	CERAMIC	D
	C564	QCS21HJ-331	330PF	50V	CERAMIC	D
	C565	QCS21HJ-221	220PF	50V	CERAMIC	D
	C566	QCS21HJ-221	220PF	50V	CERAMIC	D
	C567	QCS21HJ-331	330PF	50V	CERAMIC	D
	C568	QCS21HJ-331	330PF	50V	CERAMIC	D
	C569	QCS21HJ-331	330PF	50V	CERAMIC	D
	C570	QCS21HJ-331	330PF	50V	CERAMIC	D

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C571	QCS21HJ-221	220PF	50V	CERAMIC	D
	C572	QCS21HJ-221	220PF	50V	CERAMIC	D
	C573	QETB1HM-475	4.7MF	50V	ELECTRO	
	C574	QETB1HM-475	4.7MF	50V	ELECTRO	
	C575	QETB1HM-105	1MF	50V	ELECTRO	
	C576	QETB1HM-105	1MF	50V	ELECTRO	
	C577	QETB1EM-106	10MF	25V	ELECTRO	
	C578	QETB1EM-106	10MF	25V	ELECTRO	
	C579	QETB1EM-476	47MF	25V	ELECTRO	
	C580	QETB1EM-476	47MF	25V	ELECTRO	
	C581	QCF21HP-223	0.022MF	50V	CERAMIC	
	C582	QCF21HP-223	0.022MF	50V	CERAMIC	
	C583	QCF21HP-223	0.022MF	50V	CERAMIC	
	C584	QCF21HP-223	0.022MF	50V	CERAMIC	
	C585	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C586	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C587	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C588	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C589	QETB1CM-477	470MF	16V	ELECTRO	
	C590	QETB1CM-477	470MF	16V	ELECTRO	
	C591	QETB1AM-476	47MF	10V	ELECTRO	
	C592	QETB1HM-475	4.7MF	50V	ELECTRO	
	C593	QETB1HM-475	4.7MF	50V	ELECTRO	
	C594	QETB1HM-475	4.7MF	50V	ELECTRO	
	C595	QETB1HM-475	4.7MF	50V	ELECTRO	
	C596	QCF21HP-223	0.022MF	50V	CERAMIC	
	C597	QFN81HK-104	0.1MF	50V	MYLAR	
	C598	QCF21HP-223	0.022MF	50V	CERAMIC	A
	C599	QCF21HP-223	0.022MF	50V	CERAMIC	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R441	QRD167J-104	100K	1/6W	CARBON	
	R450	QRD167J-472	4.7K	1/6W	CARBON	
	R451	QRD167J-472	4.7K	1/6W	CARBON	
	R541	QRD167J-471	470	1/6W	CARBON	
	R542	QRD167J-471	470	1/6W	CARBON	
	R543	QRD167J-221	220	1/6W	CARBON	
	R544	QRD167J-221	220	1/6W	CARBON	
	R545	QRD167J-471	470	1/6W	CARBON	
	R546	QRD167J-471	470	1/6W	CARBON	
	R547	QRD167J-221	220	1/6W	CARBON	
	R548	QRD167J-221	220	1/6W	CARBON	
	R549	QRD167J-221	220	1/6W	CARBON	
	R550	QRD167J-221	220	1/6W	CARBON	
	R551	QRD167J-471	470	1/6W	CARBON	
	R552	QRD167J-471	470	1/6W	CARBON	
	R553	QRD167J-103	10K	1/6W	CARBON	
	R554	QRD167J-103	10K	1/6W	CARBON	
	R555	QRD167J-103	10K	1/6W	CARBON	
	R556	QRD167J-103	10K	1/6W	CARBON	
	R557	QRD167J-105	1M	1/6W	CARBON	
	R558	QRD167J-105	1M	1/6W	CARBON	
⚠	R559	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R559	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R559	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R559	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R560	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R560	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R560	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R560	QRZ0077-680	68	1/4W	FUSIBLE	D
	R561	QRD167J-680	68	1/6W	CARBON	
	R562	QRD167J-680	68	1/6W	CARBON	
	R563	QRD167J-680	68	1/6W	CARBON	
	R564	QRD167J-750	75	1/6W	CARBON	
	R565	QRD167J-750	75	1/6W	CARBON	
	R566	QRD167J-750	75	1/6W	CARBON	
	R567	QRD167J-750	75	1/6W	CARBON	
	R568	QRD167J-151	150	1/6W	CARBON	
	R569	QRD167J-151	150	1/6W	CARBON	
	R570	QRD167J-151	150	1/6W	CARBON	
	R571	QRD167J-122	1.2K	1/6W	CARBON	
	R572	QRD167J-122	1.2K	1/6W	CARBON	
	R573	QRD167J-122	1.2K	1/6W	CARBON	
	R578	QRD167J-331	330	1/6W	CARBON	
	R579	QRD167J-331	330	1/6W	CARBON	
	R580	QRD167J-331	330	1/6W	CARBON	
	R583	QRD167J-104	100K	1/6W	CARBON	
	R584	QRD167J-104	100K	1/6W	CARBON	
	R585	QRD167J-105	1M	1/6W	CARBON	
	R586	QRD167J-105	1M	1/6W	CARBON	
	R587	QRD167J-105	1M	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

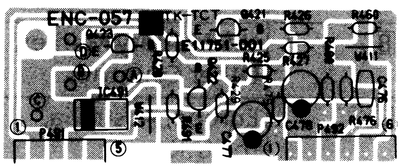
⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R588	QRD167J-105	1M	1/6W	CARBON	
⚠	R590	QRD14CJ-150S	15	1/4W	UNF.CARBON	A
⚠	R590	QRD14CJ-150S	15	1/4W	UNF.CARBON	B
⚠	R590	QRZ0077-150	15	1/4W	FUSIBLE	C
⚠	R590	QRZ0077-150	15	1/4W	FUSIBLE	D
	R591	QRD167J-221	220	1/6W	CARBON	A
	R592	QRD167J-103	10K	1/6W	CARBON	A
	R593	QRD167J-101	100	1/6W	CARBON	A
⚠	R595	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R595	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R595	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R595	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R596	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R596	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R596	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R596	QRZ0077-680	68	1/4W	FUSIBLE	D
	R597	QRD148J-103S	10K	1/4W	CARBON	
	R598	QRD148J-103S	10K	1/4W	CARBON	
	R791	QRD167J-103	10K	1/6W	CARBON	
	R792	QRD167J-103	10K	1/6W	CARBON	
	R793	QRD167J-103	10K	1/6W	CARBON	
	R794	QRD167J-473	47K	1/6W	CARBON	
	VR541	QVAA99W-EF5C	250K		VARIABLE	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11610-004	CIRCUIT BOARD	
		E70859-001	EARTH PLATE	
	J541	EMN00TV-405A	4P PIN JACK	
	J542	EMN00TV-402A	4P PIN JACK	
	J543	EMN00TV-405A	4P PIN JACK	
	J544	EMN00YV-205A	2P PIN JACK	
	J545	EMN00YV-205A	2P PIN JACK	
	J546	EMN00YV-304A	3P PIN JACK	
	J547	QMS3533-001	MINI JACK	
	J548	QMS3533-001	MINI JACK	
	P313	EMV7128-012	CONNECTOR	
	P442	EMV7123-030	CONNECTOR	
	P541	EMV7112-003R	CONNECTOR	
	P542	EMV7112-005R	CONNECTOR	
	P543	EMV5125-004	PLUG ASSY	
	P544	EMV5125-004	PLUG ASSY	
	P545	EMV5125-015	PLUG ASSY	
	P546	EMV5125-015	PLUG ASSY	
	P547	EMV5125-004	PLUG ASSY	
	P548	EMV7112-003R	CONNECTOR	
	P549	EMV7112-005	CONNECTOR	
	P550	EMV7112-006	CONNECTOR	
	P551	EMV7112-004	CONNECTOR	
	P553	EMV7112-007	CONNECTOR	
	P554	EMV7112-008	CONNECTOR	
	P555	EMV7112-003	CONNECTOR	
	P556	EMV7112-003	CONNECTOR	
	P557	EMV7112-003	CONNECTOR	B
	P560	QMV5005-002K	PLUG ASSY	
	P791	QMV5005-003K	PLUG ASSY	
	S541	QSS1F22-E01	SLIDE SWITCH	B
	FW549	EWR35B-20KST	FLAT WIRE	
	FW550	EWR36B-30KST	FLAT WIRE	
	FW555	EWR23C-16JN	FLAT WIRE	
	FW557	EWR23C-20JN	FLAT WIRE	B
	FW855	EWR38B-40KST	FLAT WIRE	
	PA546	EMV7125-015R	CONNECTOR	
	PA547	EMV7125-004R	CONNECTOR	

⚠ : SAFETY PARTS

■ ENC-057 🅱 DCS PC Board Ass'y



Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q421	2SC458(C,D)	SILICON	HITACHI	
	Q422	2SC458(C,D)	SILICON	HITACHI	
	Q423	DTC144ES	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC491	MN1280(P,Q)	I.C.	MATSUSHITA	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C476	QCBB1HK-181	180PF	50V	CERAMIC	
	C477	QETB1HM-105	1MF	50V	ELECTRO	
	C478	QETB1HM-105	1MF	50V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R425	QRD167J-473	47K	1/6W	CARBON	
	R426	QRD167J-223	22K	1/6W	CARBON	
	R427	QRD167J-103	10K	1/6W	CARBON	
	R428	QRD167J-103	10K	1/6W	CARBON	
	R429	QRD167J-471	470	1/6W	CARBON	
	R460	QRD167J-103	10K	1/6W	CARBON	
	R476	QRD167J-363	36K	1/6W	CARBON	
	R479	QRD167J-224	220K	1/6W	CARBON	
	R480	QRD167J-224	220K	1/6W	CARBON	
	R491	QRD167J-102	1K	1/6W	CARBON	

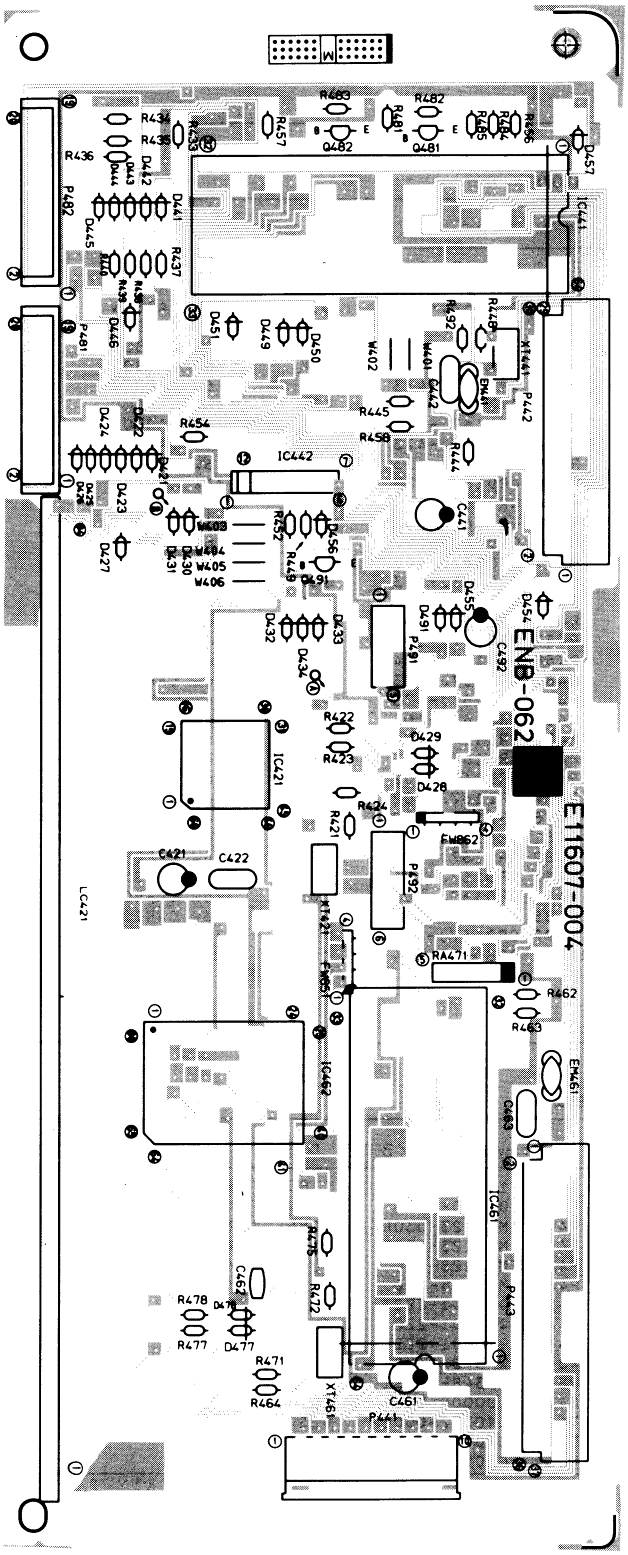
Others

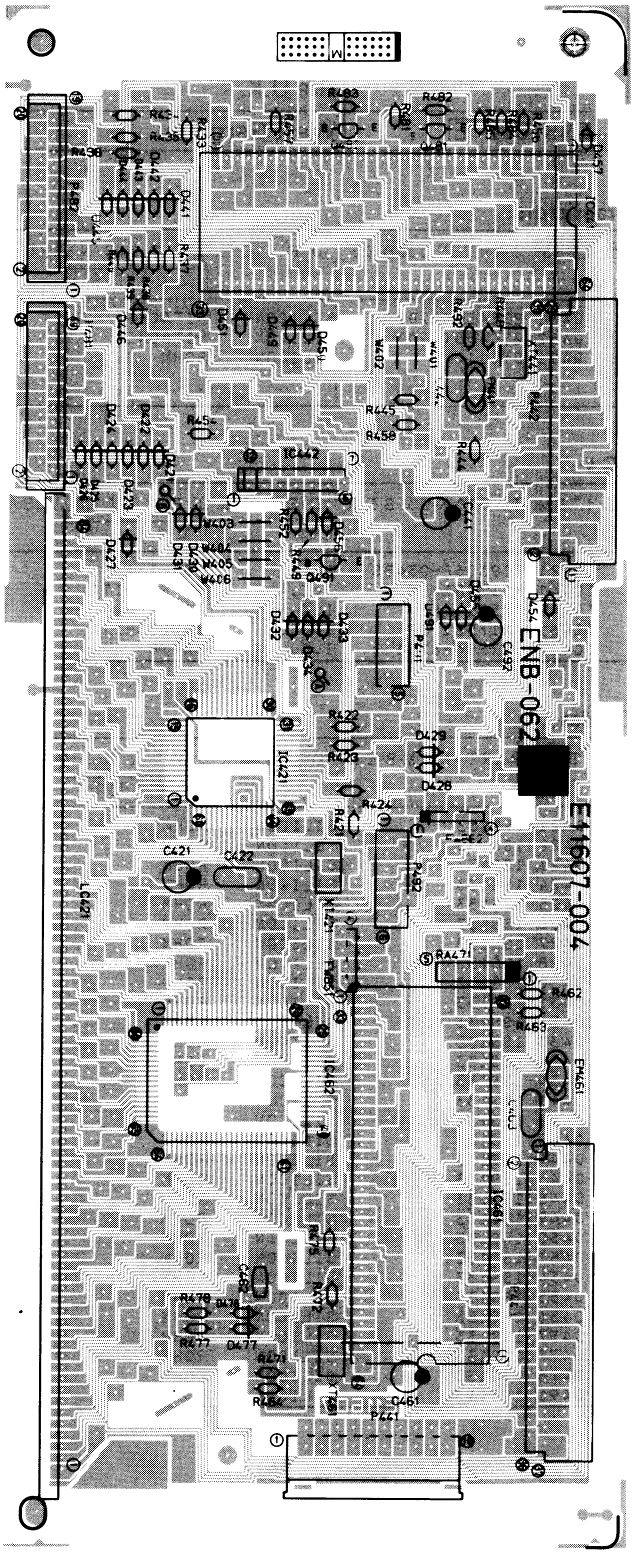
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11751-001	CIRCUIT BOARD	
	P491	EMV5101-005B	PLUG ASSY	
	P492	EMV5101-006B	PLUG ASSY	

⚠ : SAFETY PARTS

■ ENB-062 □ Logic PC Board Ass'y

Note: ENB-062□ Varies according to the areas employed. See note (1) when placing an order.


ENB-062
E11607-004
IC441
IC442
IC421
IC462
IC461
P481
P482
P441
P442
P443
P491
P492
XT421
XT441
XT461
EM461
RA471
C421
C422
C441
C461
C462
C463
C492
Q481
Q482
LC421
FW862


ENB-062
E11607-004
IC442
IC421
IC462
IC461
P441
RA471
EM461
C421
C422
C461
XT461

Note (1)

PC Board Ass'y	Designated Areas
ENB-062 B	the U.S.A., Canada
ENB-062 C	U.S.Military Market, Other Countries
ENB-062 D	Europe, Australia, the U.K.
ENB-062 E	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q481	2SC458(C,D)	SILICON	HITACHI	
	Q482	2SC458(C,D)	SILICON	HITACHI	
	Q491	DTC114YS	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC421	TC9306F-034BS	I.C.	TOSHIBA	
	IC441	MN17581JSM	I.C.	MATSUSHITA	
	IC442	DT5C144E	I.C.	ROHM	
	IC461	MN17581JSP	I.C.	MATSUSHITA	
	IC462	LC7584-8701	I.C.	SANYO	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D421	1SS133	SILICON	ROHM	
	D422	1SS133	SILICON	ROHM	
	D423	1SS133	SILICON	ROHM	
	D424	1SS133	SILICON	ROHM	
	D425	1SS133	SILICON	ROHM	
	D426	1SS133	SILICON	ROHM	
	D427	1SS133	SILICON	ROHM	
	D428	1SS133	SILICON	ROHM	
	D430	1SS133	SILICON	ROHM	
	D431	1SS133	SILICON	ROHM	
	D432	1SS133	SILICON	ROHM	B
	D433	1SS133	SILICON	ROHM	C
	D434	1SS133	SILICON	ROHM	D
	D434	1SS133	SILICON	ROHM	E
	D441	1SS133	SILICON	ROHM	
	D442	1SS133	SILICON	ROHM	
	D443	1SS133	SILICON	ROHM	
	D444	1SS133	SILICON	ROHM	
	D445	1SS133	SILICON	ROHM	
	D446	1SS133	SILICON	ROHM	
	D449	1SS133	SILICON	ROHM	
	D450	1SS133	SILICON	ROHM	
	D451	1SS133	SILICON	ROHM	
	D454	1SS133	SILICON	ROHM	
	D455	1SS133	SILICON	ROHM	
	D456	1SS133	SILICON	ROHM	
	D457	1SS133	SILICON	ROHM	
	D477	1SS133	SILICON	ROHM	
	D478	1SS133	SILICON	ROHM	
	D491	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C421	QETB0JM-477	470MF	6.3V	ELECTRO	
	C422	QCZ0205-155	1.5MF	25V	CERAMIC	
	C441	QETB0JM-477	470MF	6.3V	ELECTRO	
	C442	QCZ0205-155	1.5MF	25V	CERAMIC	
	C461	QETB0JM-477	470MF	6.3V	ELECTRO	
	C462	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C463	QCZ0205-155	1.5MF	25V	CERAMIC	
	C492	QETB1HM-225	2.2MF	50V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R421	QRD167J-222	2.2K	1/6W	CARBON	
	R422	QRD167J-222	2.2K	1/6W	CARBON	
	R423	QRD167J-332	3.3K	1/6W	CARBON	
	R424	QRD167J-103	10K	1/6W	CARBON	
	R433	QRD167J-473	47K	1/6W	CARBON	
	R434	QRD167J-473	47K	1/6W	CARBON	
	R435	QRD167J-473	47K	1/6W	CARBON	
	R436	QRD167J-473	47K	1/6W	CARBON	
	R437	QRD167J-473	47K	1/6W	CARBON	
	R438	QRD167J-473	47K	1/6W	CARBON	
	R439	QRD167J-473	47K	1/6W	CARBON	
	R440	QRD167J-473	47K	1/6W	CARBON	
	R444	QRD167J-104	100K	1/6W	CARBON	
	R445	QRD167J-102	1K	1/6W	CARBON	
	R448	QRD167J-104	100K	1/6W	CARBON	
	R449	QRD167J-103	10K	1/6W	CARBON	
	R452	QRD167J-103	10K	1/6W	CARBON	
	R454	QRD167J-221	220	1/6W	CARBON	
	R456	QRD167J-104	100K	1/6W	CARBON	
	R457	QRD167J-104	100K	1/6W	CARBON	
	R458	QRD167J-104	100K	1/6W	CARBON	
	R462	QRD167J-473	47K	1/6W	CARBON	
	R463	QRD167J-473	47K	1/6W	CARBON	
	R464	QRD167J-104	100K	1/6W	CARBON	
	R471	QRD167J-155	1.5M	1/6W	CARBON	
	R472	QRD167J-155	1.5M	1/6W	CARBON	
	R475	QRD167J-102	1K	1/6W	CARBON	
	R477	QRD167J-202	2K	1/6W	CARBON	
	R478	QRD167J-202	2K	1/6W	CARBON	
	R481	QRD167J-473	47K	1/6W	CARBON	
	R482	QRD167J-223	22K	1/6W	CARBON	
	R483	QRD167J-101	100	1/6W	CARBON	
	R484	QRD167J-103	10K	1/6W	CARBON	
	R485	QRD167J-472	4.7K	1/6W	CARBON	
	R492	QRD167J-473	47K	1/6W	CARBON	
	RA471	QRB045J-104	100K	1/8W	R.NETWORK	

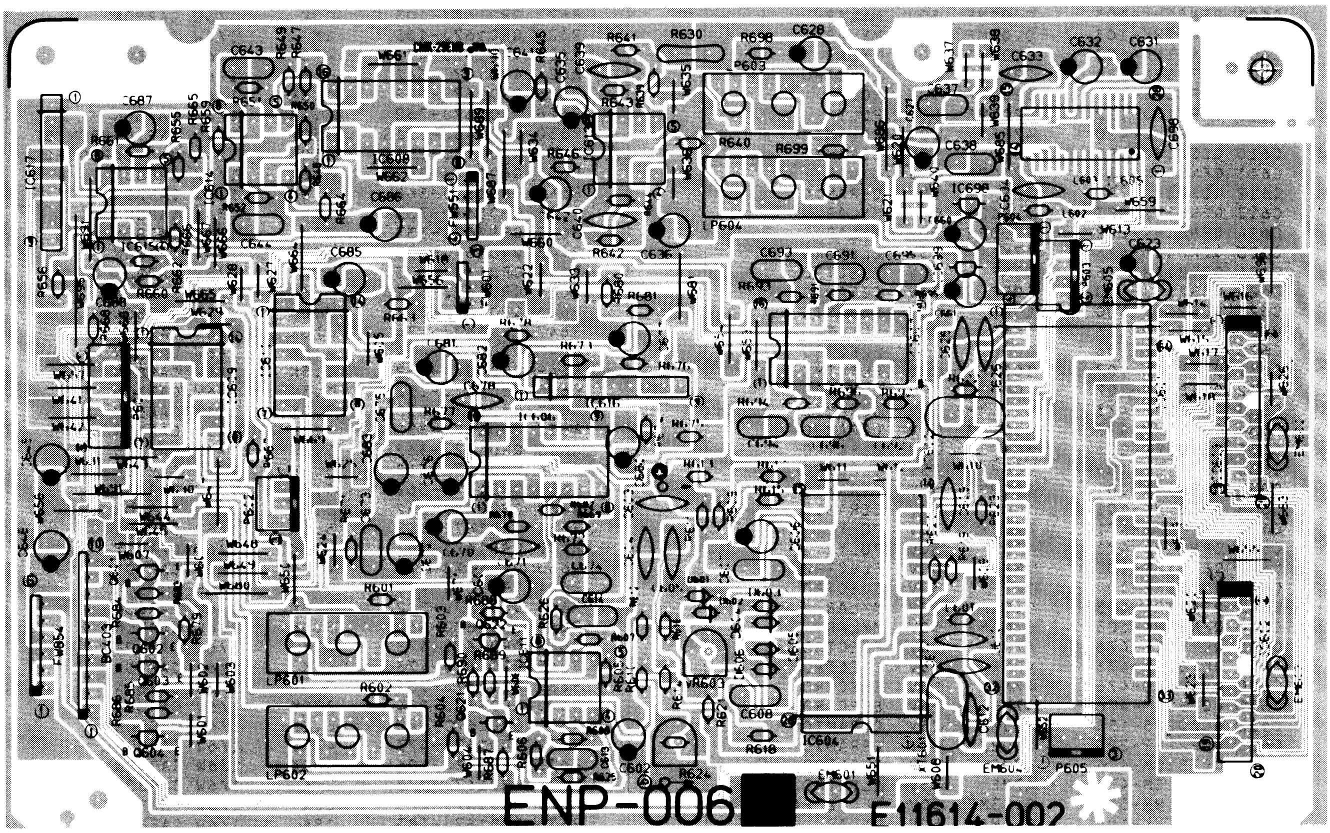
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11607-004	CIRCUIT BOARD	
	P441	E04370-010B	CONNECTOR	
	P442	EMV7123-030R	CONNECTOR	
	P443	EMV7123-037R	CONNECTOR	
	P481	EMV5128-020	PLUG ASSY	
	P482	EMV5128-020	PLUG ASSY	
	EM421	EQF0601-222T	EMI FILTER	
	EM441	EQF0601-222T	EMI FILTER	
	EM461	EQF0601-222T	EMI FILTER	
	FW851	EWR34B-16KST	FLAT WIRE	
	FW862	EWR34B-55KST	FLAT WIRE	
	LC421	ELU0002-046	LCD PANEL	
	XT421	ECX0072-000EM	RESONATOR	
	XT441	ECX0072-000EM	RESONATOR	
	XT461	ECX0072-000EM	RESONATOR	

⚠ : SAFETY PARTS

■ ENP-006 □ D.A.P. PC Board Ass'y

Note: ENP-006□ Varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENP-006 Ⓐ	the U.S.A., Canada, U.S.Military Market, Other Countries
ENP-006 Ⓑ	the U.K., Australia, Europe
ENP-006 Ⓒ	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q601	DTA144ES	SILICON	ROHM	
	Q602	DTA114YS	SILICON		
	Q603	DTA114YS	SILICON		
	Q604	DTA114YS	SILICON		
	Q621	DTA144ES	SILICON	ROHM	
	Q622	2SC3068	SILICON	SANYO	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC601	VC4097-001	I.C.	TOSHIBA	
	IC602	M5M4464L-12	I.C.		
	IC603	M5M4464L-12	I.C.		
	IC604	TD6704P	I.C.		
	IC605	UPD6355G	I.C.	NEC	
	IC606	LA2730	I.C.		
	IC607	TC4052BP	I.C.	TOSHIBA	
	IC608	TC9176P	I.C.	TOSHIBA	
	IC609	LC4966	I.C.	SANYO	
	IC610	LC4966	I.C.	SANYO	
	IC611	NJM4560DD	I.C.		
	IC613	NJM4560DD	I.C.		
	IC614	NJM4560DD	I.C.		
	IC615	NJM4560DD	I.C.		
	IC616	NJM4560SD	I.C.		
	IC617	NJM4560SD	I.C.		
	IC698	NJM78L05A	I.C.		
	IC699	TA79L010P	I.C.		

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D601	1SS133	SILICON	ROHM	
	D602	1SS133	SILICON	ROHM	
	D603	1SS133	SILICON	ROHM	
	D604	1SS133	SILICON	ROHM	
	D605	1SS133	SILICON	ROHM	
	D606	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C601	QETB1EM-106	10MF	25V	ELECTRO	
	C602	QETB1EM-106	10MF	25V	ELECTRO	
	C603	QFN81HK-103	0.01MF	50V	MYLAR	
	C604	QFN81HK-103	0.01MF	50V	MYLAR	
	C605	QFN81HK-103	0.01MF	50V	MYLAR	
	C606	QETB1EM-226	22MF	25V	ELECTRO	
	C607	QFP81HJ-122	1200PF	50V	POLY	
	C608	QFP81HJ-122	1200PF	50V	POLY	
	C609	QCS21HJ-470	47PF	50V	CERAMIC	
	C610	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C611	QFN81HK-472	4700PF	50V	MYLAR	
	C612	QCS21HJ-7R0	7PF	50V	CERAMIC	
	C613	QFN81HK-123	0.012MF	50V	MYLAR	
	C614	QFN81HK-222	2200PF	50V	MYLAR	
	C623	QEK61EM-476	47MF	25V	ELECTRO	
	C624	QETB1AM-476	47MF	10V	ELECTRO	
	C625	QCS21HJ-100	10PF	50V	CERAMIC	
	C626	QCS21HJ-100	10PF	50V	CERAMIC	
	C627	QETB1EM-106	10MF	25V	ELECTRO	
	C628	QETB1EM-106	10MF	25V	ELECTRO	
	C631	QETB1AM-107	100MF	10V	ELECTRO	
	C632	QETB1AM-107	100MF	10V	ELECTRO	
	C633	QCF21HP-473	0.047MF	50V	CERAMIC	
	C634	QCF21HP-473	0.047MF	50V	CERAMIC	
	C635	QETB1EM-106	10MF	25V	ELECTRO	
	C636	QETB1EM-106	10MF	25V	ELECTRO	
	C637	QCBB1HK-101	100PF	50V	CERAMIC	
	C638	QCBB1HK-101	100PF	50V	CERAMIC	
	C639	QFP81HJ-471	470PF	50V	POLY	
	C640	QFP81HJ-471	470PF	50V	POLY	
	C641	QETB1HM-105	1MF	50V	ELECTRO	
	C642	QETB1HM-105	1MF	50V	ELECTRO	
	C643	QFN81HK-103	0.01MF	50V	MYLAR	
	C644	QFN81HK-103	0.01MF	50V	MYLAR	
	C645	QETB1EM-476	47MF	25V	ELECTRO	
	C646	QETB1EM-476	47MF	25V	ELECTRO	
	C650	QETB1CM-476	47MF	16V	ELECTRO	
	C651	QETB1EM-476	47MF	25V	ELECTRO	
	C652	QCZ0205-155	1.5MF	25V	CERAMIC	
	C653	QCF21HP-223	0.022MF	50V	CERAMIC	
	C660	QETB1EM-476	47MF	25V	ELECTRO	
	C661	QETB1EM-476	47MF	25V	ELECTRO	
	C670	QEB51HM-334	0.33MF	50V	LLC ELECTR	
	C671	QFN81HK-104	0.1MF	50V	MYLAR	
	C672	QETB1HM-105	1MF	50V	ELECTRO	
	C673	QFN81HK-333	0.033MF	50V	MYLAR	
	C674	QFN81HK-472	4700PF	50V	MYLAR	
	C675	QFN81HK-273	0.027MF	50V	MYLAR	
	C676	QETB1EM-226	22MF	25V	ELECTRO	
	C677	QETB1HM-105	1MF	50V	ELECTRO	
	C678	QFN81HK-562	5600PF	50V	MYLAR	
	C680	QETB1HM-105	1MF	50V	ELECTRO	
	C681	QETB1HM-105	1MF	50V	ELECTRO	
	C682	QETB1HM-106	10MF	50V	ELECTRO	
	C683	QETB1AM-107	100MF	10V	ELECTRO	
	C685	QETB1EM-226	22MF	25V	ELECTRO	
	C686	QETB1EM-226	22MF	25V	ELECTRO	
	C687	QETB1EM-226	22MF	25V	ELECTRO	
	C688	QETB1EM-226	22MF	25V	ELECTRO	
	C691	QFN81HK-393	0.039MF	50V	MYLAR	
	C692	QFN81HK-393	0.039MF	50V	MYLAR	
	C693	QFN81HK-103	0.01MF	50V	MYLAR	
	C694	QFN81HK-103	0.01MF	50V	MYLAR	
	C695	QFN81HK-392	3900PF	50V	MYLAR	
	C696	QFN81HK-392	3900PF	50V	MYLAR	
	C698	QCF21HP-473	0.047MF	50V	CERAMIC	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R601	QRD167J-332	3.3K	1/6W	CARBON	
	R602	QRD167J-332	3.3K	1/6W	CARBON	
	R603	QRD167J-562	5.6K	1/6W	CARBON	
	R604	QRD167J-562	5.6K	1/6W	CARBON	
	R605	QRD167J-563	56K	1/6W	CARBON	
	R606	QRD167J-392	3.9K	1/6W	CARBON	
	R607	QRD167J-473	47K	1/6W	CARBON	
	R608	QRD167J-752	7.5K	1/6W	CARBON	
	R609	QRD167J-103	10K	1/6W	CARBON	
	R610	QRD167J-103	10K	1/6W	CARBON	
	R611	QRD167J-562	5.6K	1/6W	CARBON	
	R612	QRD167J-562	5.6K	1/6W	CARBON	
	R613	QRD167J-562	5.6K	1/6W	CARBON	
⚠	R614	QRV144F-1002	10K	1/4W	M.FILM	
	R615	QRD167J-302	3K	1/6W	CARBON	
	R616	QRD167J-121	120	1/6W	CARBON	
⚠	R617	QRV144F-1002	10K	1/4W	M.FILM	
⚠	R618	QRV144F-1002	10K	1/4W	M.FILM	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R619	QRD167J-272	2.7K	1/6W	CARBON	
	R620	QRD167J-272	2.7K	1/6W	CARBON	
	R621	QRD167J-103	10K	1/6W	CARBON	
	R622	QRD167J-105	1M	1/6W	CARBON	
	R623	QRD167J-471	470	1/6W	CARBON	
	R624	QRD167J-562	5.6K	1/6W	CARBON	
	R625	QRD167J-122	1.2K	1/6W	CARBON	
	R626	QRD167J-752	7.5K	1/6W	CARBON	
⚠	R630	QRD14CJ-151S	150	1/4W	UNF.CARBON	B
⚠	R630	QRD14CJ-151S	150	1/4W	UNF.CARBON	C
	R639	QRD167J-562	5.6K	1/6W	CARBON	
	R640	QRD167J-562	5.6K	1/6W	CARBON	
	R641	QRD167J-333	33K	1/6W	CARBON	
	R642	QRD167J-333	33K	1/6W	CARBON	
	R643	QRD167J-683	68K	1/6W	CARBON	
	R644	QRD167J-683	68K	1/6W	CARBON	
	R645	QRD167J-562	5.6K	1/6W	CARBON	
	R646	QRD167J-562	5.6K	1/6W	CARBON	
	R647	QRD167J-474	470K	1/6W	CARBON	
	R648	QRD167J-474	470K	1/6W	CARBON	
	R649	QRD167J-152	1.5K	1/6W	CARBON	
	R650	QRD167J-152	1.5K	1/6W	CARBON	
	R651	QRD167J-332	3.3K	1/6W	CARBON	
	R652	QRD167J-332	3.3K	1/6W	CARBON	
	R655	QRD167J-562	5.6K	1/6W	CARBON	
	R656	QRD167J-562	5.6K	1/6W	CARBON	
	R659	QRD167J-562	5.6K	1/6W	CARBON	
	R660	QRD167J-562	5.6K	1/6W	CARBON	
	R661	QRD167J-562	5.6K	1/6W	CARBON	
	R662	QRD167J-562	5.6K	1/6W	CARBON	
	R663	QRD167J-473	47K	1/6W	CARBON	
	R664	QRD167J-473	47K	1/6W	CARBON	
	R665	QRD167J-562	5.6K	1/6W	CARBON	
	R666	QRD167J-562	5.6K	1/6W	CARBON	
	R667	QRD167J-473	47K	1/6W	CARBON	
	R668	QRD167J-473	47K	1/6W	CARBON	
	R669	QRD167J-332	3.3K	1/6W	CARBON	
	R670	QRD167J-274	270K	1/6W	CARBON	
	R671	QRD167J-622	6.2K	1/6W	CARBON	
	R672	QRD167J-473	47K	1/6W	CARBON	
	R673	QRD167J-104	100K	1/6W	CARBON	
	R674	QRD167J-273	27K	1/6W	CARBON	
	R675	QRD167J-223	22K	1/6W	CARBON	
	R676	QRD167J-183	18K	1/6W	CARBON	
	R677	QRD167J-181	180	1/6W	CARBON	
	R678	QRD167J-562	5.6K	1/6W	CARBON	
	R679	QRD167J-103	10K	1/6W	CARBON	
	R680	QRD167J-184	180K	1/6W	CARBON	
	R681	QRD167J-683	68K	1/6W	CARBON	
	R682	QRD167J-274	270K	1/6W	CARBON	
	R683	QRD167J-103	10K	1/6W	CARBON	
	R684	QRD167J-103	10K	1/6W	CARBON	
	R685	QRD167J-103	10K	1/6W	CARBON	
	R686	QRD167J-103	10K	1/6W	CARBON	
	R687	QRD167J-473	47K	1/6W	CARBON	
	R688	QRD167J-473	47K	1/6W	CARBON	
	R689	QRD167J-222	2.2K	1/6W	CARBON	
	R690	QRD167J-103	10K	1/6W	CARBON	
	R691	QRD167J-224	220K	1/6W	CARBON	
	R692	QRD167J-224	220K	1/6W	CARBON	
	R693	QRD167J-224	220K	1/6W	CARBON	
	R694	QRD167J-224	220K	1/6W	CARBON	
	R695	QRD167J-224	220K	1/6W	CARBON	
	R696	QRD167J-224	220K	1/6W	CARBON	
	R698	QRD167J-562	5.6K	1/6W	CARBON	
	R699	QRD167J-562	5.6K	1/6W	CARBON	
	VR603	QVZ3518-222	2.2K	0.1W	VARIABLE	

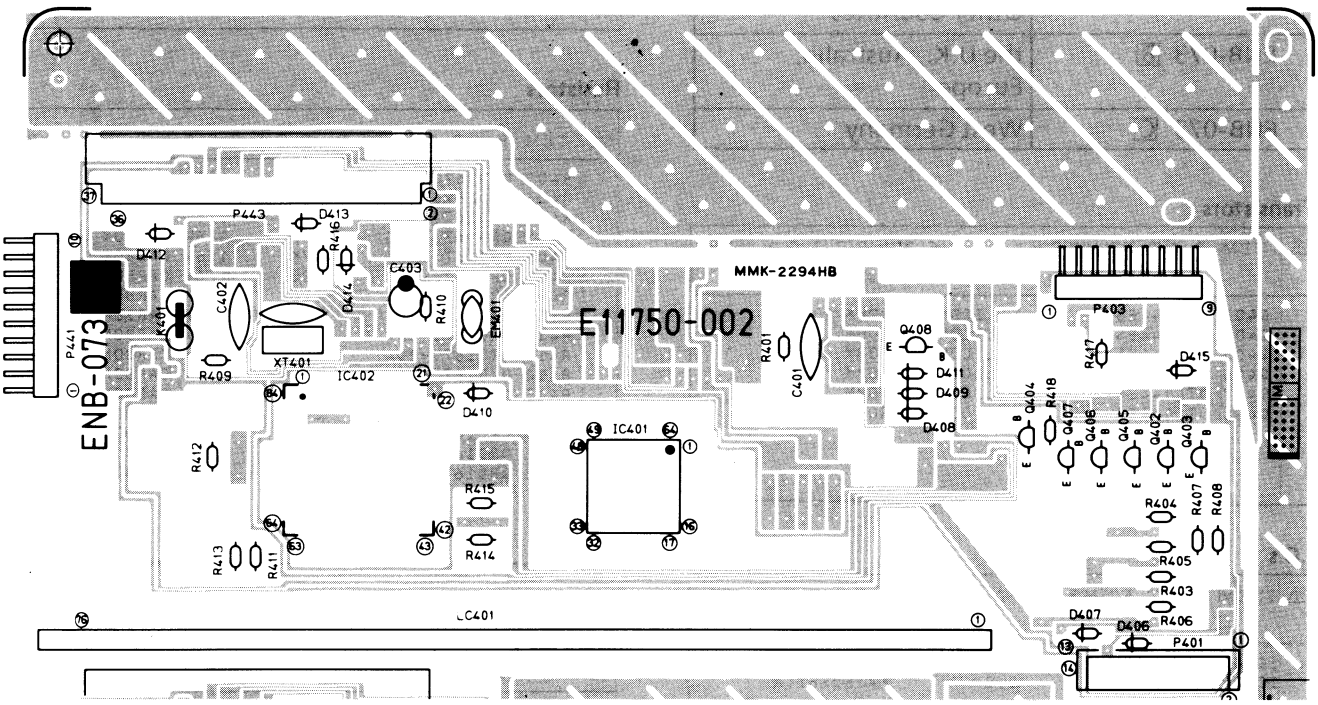
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11614-003	CIRCUIT BOARD	
	L601	EQL4004-1R0	INDUCTOR	
	L602	EQL4004-1R0	INDUCTOR	
	L603	EQL4004-1R0	INDUCTOR	
	BC403	EWS20A-005	SOCKET WIRE	
	EM601	EQF0601-222T.	EMI FILTER	
	EM602	EQF0601-222T	EMI FILTER	
	EM603	EQF0601-222T	EMI FILTER	
	EM604	EQF0601-222T	EMI FILTER	
	EM605	EQF0601-222T	EMI FILTER	
	FW551	EWR34B-50KST	FLAT WIRE	
	FW854	EWR36B-45KST	FLAT WIRE	
	LP601	EQF0101-008	LOW PASS FILTER	
	LP602	EQF0101-008	LOW PASS FILTER	
	LP603	EQF0101-008	LOW PASS FILTER	
	LP604	EQF0101-008	LOW PASS FILTER	
	XT601	ECX0075-000KA	RESONATOR	
	XT602	ECX0012-288KF	RESONATOR	

⚠ : SAFETY PARTS

■ ENB-073 ☐ SEA Display PC Board Ass'y

Note: ENB-073☐ Varies according to the areas employed. See note (1) when placing an order.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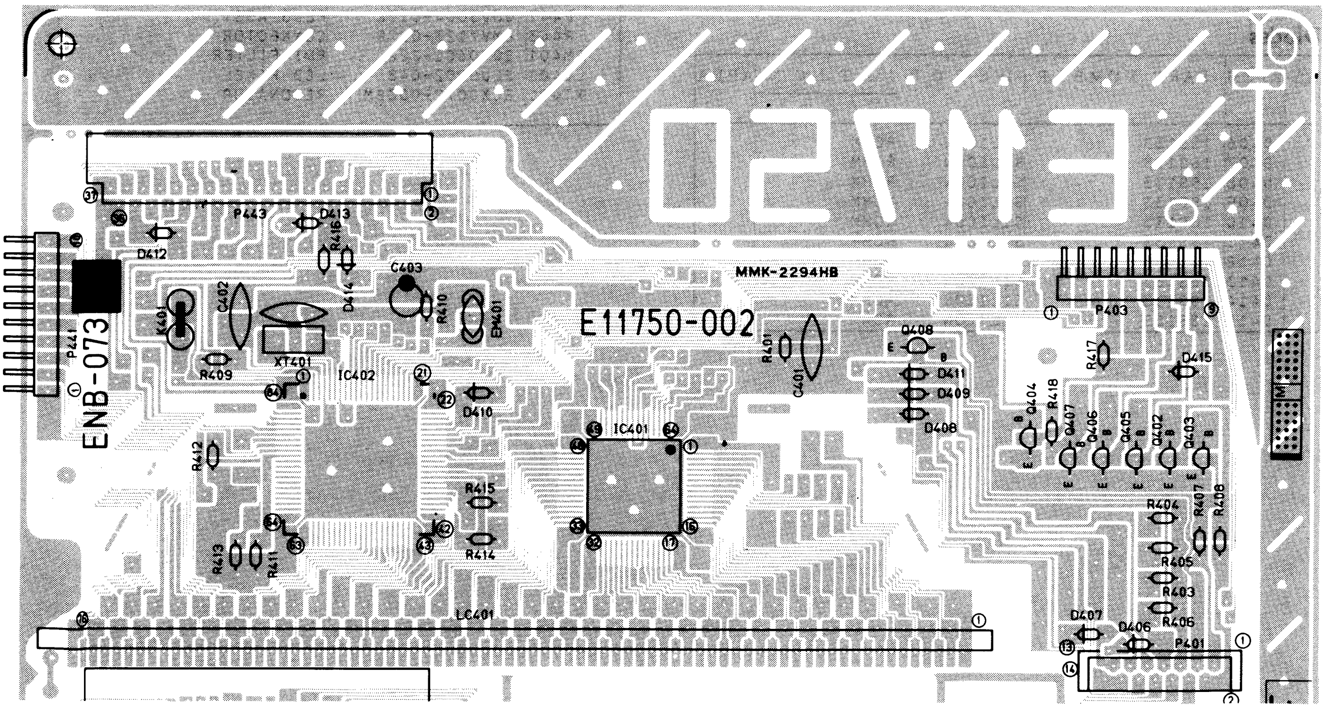
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R401
R403
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R405
R406
R407
R408
R409
R410
R411
R412
R413
R414
R415
R416
R417
R418

Note (1)

PC Board Ass'y	Designated Areas
ENB-073 🄰	the U.S.A., Canada, U.S.Military Market, Other Countries
ENB-073 🄱	the U.K., Australia, Europe
ENB-073 🄲	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q402	DTC144ES	SILICON	ROHM	
	Q403	DTC144ES	SILICON	ROHM	
	Q405	DTC144ES	SILICON	ROHM	
	Q406	DTC144ES	SILICON	ROHM	
	Q407	DTC144ES	SILICON	ROHM	
	Q408	DTC144ES	SILICON	ROHM	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC401	LC7582A	I.C.	SANYO	
	IC402	MN178611JSQ	I.C.	MATSUSHITA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D406	1SS133	SILICON	ROHM	
	D407	1SS133	SILICON	ROHM	
	D408	1SS133	SILICON	ROHM	
	D409	1SS133	SILICON	ROHM	
	D410	1SS133	SILICON	ROHM	
	D411	1SS133	SILICON	ROHM	
	D412	1SS133	SILICON	ROHM	
	D413	1SS133	SILICON	ROHM	
	D414	1SS133	SILICON	ROHM	
	D415	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C401	QCS21HJ-681	680PF	50V	CERAMIC	
	C402	QCF21HP-223	0.022MF	50V	CERAMIC	
	C403	QETB0JM-477	470MF	6.3V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R401	QRD167J-513	51K	1/6W	CARBON	
	R403	QRD167J-473	47K	1/6W	CARBON	
	R404	QRD167J-473	47K	1/6W	CARBON	
	R405	QRD167J-473	47K	1/6W	CARBON	
	R406	QRD167J-473	47K	1/6W	CARBON	
	R407	QRD167J-221	220	1/6W	CARBON	
	R408	QRD167J-221	220	1/6W	CARBON	
	R409	QRD167J-104	100K	1/6W	CARBON	
	R410	QRD167J-104	100K	1/6W	CARBON	
	R411	QRD167J-104	100K	1/6W	CARBON	
	R412	QRD167J-104	100K	1/6W	CARBON	
	R413	QRD167J-104	100K	1/6W	CARBON	
	R414	QRD167J-102	1K	1/6W	CARBON	
	R415	QRD167J-102	1K	1/6W	CARBON	
	R416	QRD167J-472	4.7K	1/6W	CARBON	
	R418	QRD167J-473	47K	1/6W	CARBON	

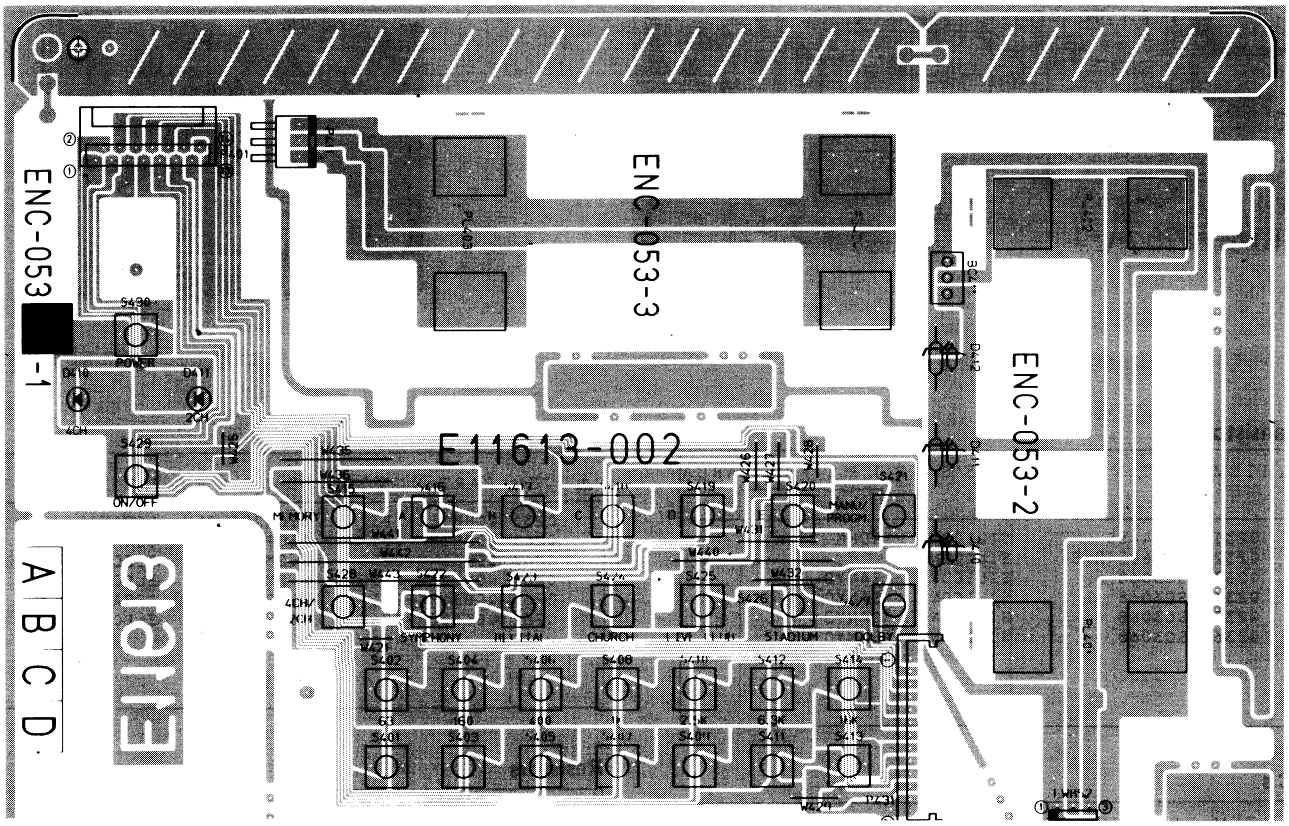
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11750-003	CIRCUIT BOARD	
	K401	ENZ8101-007	INDUCTOR	
	P401	EMV5128-014	PLUG ASSY	
	P403	QMV5004-009K	PLUG ASSY	
	P441	QMV5004-010K	PLUG ASSY	
	P443	EMV7123-037R	CONNECTOR	
	EM401	EQF0601-222	EMI FILTER	
	LC401	ELU0002-048	LCD PANEL	
	XT401	ECX0072-000EM	RESONATOR	

⚠ : SAFETY PARTS

■ ENC-053 □ SEA Switch PC Board Ass'y

Note: ENC-053□ Varies according to the areas employed. See note (1) when placing an order.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ENC-053-2
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A
B
C
D
S430
POWER
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D411
4CH
2CH
S429
ON/OFF
P401
W435
W436
S415
S416
S417
S419
S420
S421
MEMORY
A
C
D
E
MANU/PROGM.
W441
W442
W440
W431
W432
W426
W427
W428
S428
W443
S422
S425
S426
4CH/2CH
SYMPHONY
CHURCH
STADIUM
DOLBY
W421
S402
S404
S406
S408
S412
S414
63
160
400
2.5K
6.3K
16K
S401
S403
S405
S411
S413
W429
P431
D412
D414
D413
BC411
PL402
PL401
PL403
FW852

Note (1)

PC Board Ass'y	Designated Areas
ENC-053 Ⓐ	the U.S.A., Canada, U.S.Military Market, Other Countries
ENC-053 Ⓑ	the U.K., Australia, Europe, West Germany

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D410	MTZ8.2JC	ZENER	ROHM	
	D411	MTZ8.2JC	ZENER	ROHM	
	D412	MTZ8.2JC	ZENER	ROHM	
	D413	SLH-34DC3F	L.E.D.	ROHM	
	D414	SLH-34DC3F	L.E.D.	ROHM	

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11613-002	CIRCUIT BOARD	
		E45524-002	FUSE CLIP	
		E45524-002	FUSE CLIP	
		E48269-001	SPACER	B
	P401	EMV7128-014	CONNECTOR	
	P411	QMV5004-003K	PLUG ASSY	
	P431	EMV5120-012	PLUG ASSY	
	S401	ESP0001-018	TACT SWITCH	
	S402	ESP0001-018	TACT SWITCH	
	S403	ESP0001-018	TACT SWITCH	
	S404	ESP0001-018	TACT SWITCH	
	S405	ESP0001-018	TACT SWITCH	
	S406	ESP0001-018	TACT SWITCH	
	S407	ESP0001-018	TACT SWITCH	
	S408	ESP0001-018	TACT SWITCH	
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	S411	ESP0001-018	TACT SWITCH	
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	S414	ESP0001-018	TACT SWITCH	
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	S416	ESP0001-018	TACT SWITCH	
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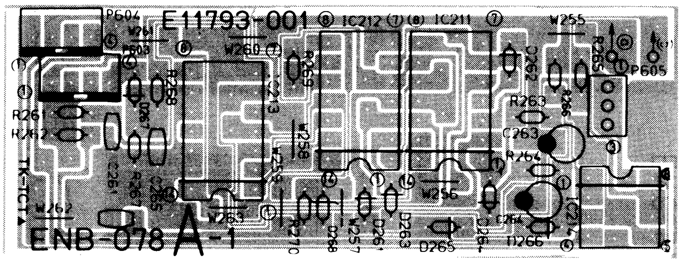
	S418	ESP0001-018	TACT SWITCH	
	S419	ESP0001-018	TACT SWITCH	
	S420	ESP0001-018	TACT SWITCH	
	S421	ESP0001-018	TACT SWITCH	
	S422	ESP0001-018	TACT SWITCH	
	S423	ESP0001-018	TACT SWITCH	
	S424	ESP0001-018	TACT SWITCH	
	S425	ESP0001-018	TACT SWITCH	
	S426	ESP0001-018	TACT SWITCH	
	S427	ESP0001-018	TACT SWITCH	
	S428	ESP0001-018	TACT SWITCH	
	S429	ESP0001-018	TACT SWITCH	
	S430	ESP0001-018	TACT SWITCH	
	BC411	EWS013-253	SOCKET WIRE	
	FW852	EWR33B-25KST	FLAT WIRE	

⚠ : SAFETY PARTS

■ ENB-078 Ⓐ Muting Control PC Board Ass'y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R262
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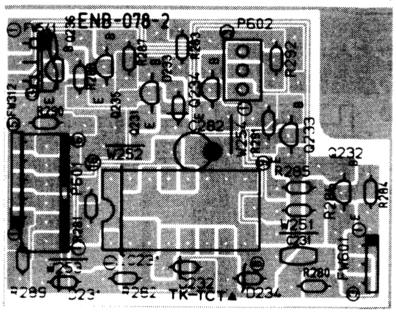
D267
D268
TK-ICT
ENB-078 A-1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C282
C231
W251
W252
D234
TK-ICT

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q231	DTA144ES	SILICON	ROHM	
	Q232	2SC1685(R/S)	SILICON		
	Q233	2SC3068	SILICON	SANYO	
	Q234	2SC3068	SILICON	SANYO	
	Q235	2SC3068	SILICON	SANYO	
	Q236	2SC3068	SILICON	SANYO	

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC211	TC74HC02AP	I.C.		
	IC212	TC74HC04AP	I.C.		
	IC213	TC74HC32AP	I.C.		
	IC214	VC4580D	I.C.		
	IC231	HD74HC123P	I.C.		

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D231	1SS133	SILICON	ROHM	
	D232	1SS133	SILICON	ROHM	
	D233	1SS133	SILICON	ROHM	
	D234	MTZ5.1JB	ZENER	ROHM	
	D261	1SS133	SILICON	ROHM	
	D262	1SS133	SILICON	ROHM	
	D263	1SS133	SILICON	ROHM	
	D264	1SS133	SILICON	ROHM	
	D265	1SS133	SILICON	ROHM	
	D266	1SS133	SILICON	ROHM	
	D267	1SS133	SILICON	ROHM	
	D268	MTZ2.7JB	ZENER	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C231	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C261	QCBB1HK-151	150PF	50V	CERAMIC	
	C263	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C264	QEK61HM-225G	2.2MF	50V	ELECTRO	
	C265	QCBB1HK-221	220PF	50V	CERAMIC	
	C282	QEK61CM-106G	10MF	16V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R261	QRD167J-473	47K	1/6W	CARBON	
	R262	QRD167J-473	47K	1/6W	CARBON	
	R263	QRD167J-223	22K	1/6W	CARBON	
	R264	QRD167J-223	22K	1/6W	CARBON	
	R265	QRD167J-223	22K	1/6W	CARBON	
	R266	QRD167J-223	22K	1/6W	CARBON	
	R267	QRD167J-334	330K	1/6W	CARBON	
	R268	QRD167J-103	10K	1/6W	CARBON	
	R269	QRD167J-102	1K	1/6W	CARBON	
	R270	QRD167J-104	100K	1/6W	CARBON	
	R280	QRD167J-222	2.2K	1/6W	CARBON	
	R281	QRD167J-104	100K	1/6W	CARBON	
	R282	QRD167J-103	10K	1/6W	CARBON	
	R283	QRD167J-103	10K	1/6W	CARBON	
	R284	QRD167J-103	10K	1/6W	CARBON	
	R285	QRD167J-103	10K	1/6W	CARBON	
	R286	QRD167J-103	10K	1/6W	CARBON	
	R287	QRD167J-103	10K	1/6W	CARBON	
	R288	QRD167J-103	10K	1/6W	CARBON	
	R289	QRD167J-102	1K	1/6W	CARBON	
	R290	QRD167J-102	1K	1/6W	CARBON	
	R291	QRD167J-102	1K	1/6W	CARBON	
	R292	QRD167J-102	1K	1/6W	CARBON	

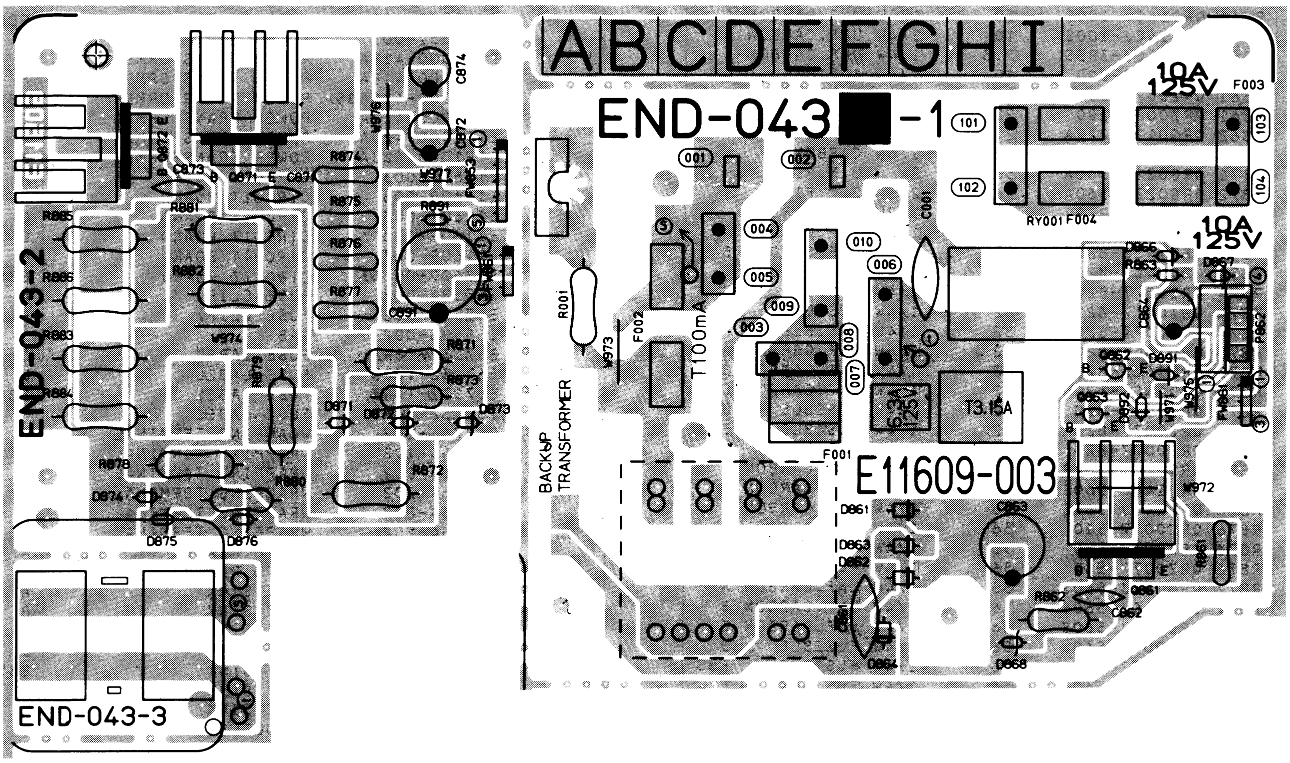
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11793-002	CIRCUIT BOARD	
	P601	E305605-006	CONNECTOR	
	P602	E305605-003	CONNECTOR	
	P603	E305605-004	CONNECTOR	
	P604	E305605-004	CONNECTOR	
	P605	E305605-003	CONNECTOR	
	FW312	EWR35B-40KST	FLAT WIRE	
	FW541	EWR23C-60JN	FLAT WIRE	
	FW601	EWR33B-08SST	FLAT WIRE	

⚠ : SAFETY PARTS

■ END-043 □ Power Supply PC Board Ass'y

Note: END-043□ Varies according to the areas employed. See note (1) when placing an order.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10A 125V
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F002
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Note (1)

PC Board Ass'y	Designated Areas
END-043 A	the U.S.A.
END-043 B	Canada
END-043 C	U.S.Military Market, Other Countries
END-043 D	West Germany, Europe
END-043 E BS	the U.K.
END-043 F	Australia

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q861	2SD1265A(O)	SILICON		C
	Q862	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q863	DTC114YS	SILICON	ROHM	
	Q871	2SB1133(R,S)	SILICON	SANYO	
	Q872	2SB1133(R,S)	SILICON	SANYO	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D861	ERA15-02L19	SILICON		
	D862	ERA15-02L19	SILICON		
	D863	ERA15-02L19	SILICON		
	D864	ERA15-02L19	SILICON		
	D866	1SS133	SILICON	ROHM	
	D867	RD6.2JSB3	ZENER	NEC	
	D868	MTZ12JC	ZENER	ROHM	C
	D871	1SS133	SILICON	ROHM	
	D872	RD10JSB3	ZENER	NEC	
	D873	RD16JSB3	ZENER	NEC	
	D874	1SS133	SILICON	ROHM	
	D875	RD10JSB3	ZENER	NEC	
	D876	RD15JSB3	ZENER	NEC	
	D891	1SS133	SILICON	ROHM	
	D892	1SS133	SILICON	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9019-472	4700PF		CERAMIC	A
	C001	QCZ9019-472	4700PF		CERAMIC	B
	C001	QCZ9019-472	4700PF		CERAMIC	C
	C001	QCZ9019-472	4700PF		CERAMIC	D
	C001	QCZ9019-472	4700PF		CERAMIC	F
	C001	QCZ9019-472BS	4700PF		CERAMIC	EBS
	C861	QCE22HP-103	0.01MF	500V	CERAMIC	
	C862	QCF21HP-472	4700PF	50V	CERAMIC	C
	C863	QETB1EM-477	470MF	25V	ELECTRO	A
	C863	QETB1EM-477	470MF	25V	ELECTRO	B
	C863	QETB1EM-477	470MF	25V	ELECTRO	D
	C863	QETB1EM-477	470MF	25V	ELECTRO	EBS
	C863	QETB1EM-477	470MF	25V	ELECTRO	F
	C863	QETB1JM-227	220MF	63V	ELECTRO	C
	C864	QETB1CM-476	47MF	16V	ELECTRO	
	C871	QCF21HP-472	4700PF	50V	CERAMIC	
	C872	QETB1HM-476	47MF	50V	ELECTRO	
	C873	QCF21HP-472	4700PF	50V	CERAMIC	
	C874	QETB1EM-476	47MF	25V	ELECTRO	
	C891	EEZ0502-479	47000MF	5.5V	ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	A
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	B
⚠	R861	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R861	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R861	QRD14CJ-3R3S	3.3	1/4W	UNF.CARBON	C
⚠	R861	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R861	QRZ0077-220	22	1/4W	FUSIBLE	EBS
⚠	R861	QRZ0077-220	22	1/4W	FUSIBLE	F
⚠	R862	QRG012J-222A	2.2K	1W	O.M.FILM	C
	R863	QRD167J-821	820	1/6W	CARBON	
⚠	R871	QRG022J-560A	56	2W	O.M.FILM	
⚠	R872	QRG022J-560A	56	2W	O.M.FILM	
⚠	R873	QRD125J-222	2.2K	1/2W	UNF.CARBON	
⚠	R874	QRD14CJ-820S	82	1/4W	UNF.CARBON	A
⚠	R874	QRD14CJ-820S	82	1/4W	UNF.CARBON	B
⚠	R874	QRD14CJ-820S	82	1/4W	UNF.CARBON	C
⚠	R874	QRZ0077-820	82	1/4W	FUSIBLE	D
⚠	R874	QRZ0077-820	82	1/4W	FUSIBLE	EBS
⚠	R874	QRZ0077-820	82	1/4W	FUSIBLE	F
⚠	R875	QRD14CJ-820S	82	1/4W	UNF.CARBON	A
⚠	R875	QRD14CJ-820S	82	1/4W	UNF.CARBON	B
⚠	R875	QRD14CJ-820S	82	1/4W	UNF.CARBON	C
⚠	R875	QRZ0077-820	82	1/4W	FUSIBLE	D
⚠	R875	QRZ0077-820	82	1/4W	FUSIBLE	EBS
⚠	R875	QRZ0077-820	82	1/4W	FUSIBLE	F
⚠	R876	QRD14CJ-560S	56	1/4W	UNF.CARBON	A
⚠	R876	QRD14CJ-560S	56	1/4W	UNF.CARBON	B
⚠	R876	QRD14CJ-560S	56	1/4W	UNF.CARBON	C
⚠	R876	QRZ0077-560	56	1/4W	FUSIBLE	D
⚠	R876	QRZ0077-560	56	1/4W	FUSIBLE	EBS
⚠	R876	QRZ0077-560	56	1/4W	FUSIBLE	F
⚠	R877	QRD14CJ-560S	56	1/4W	UNF.CARBON	A
⚠	R877	QRD14CJ-560S	56	1/4W	UNF.CARBON	B
⚠	R877	QRD14CJ-560S	56	1/4W	UNF.CARBON	C
⚠	R877	QRZ0077-560	56	1/4W	FUSIBLE	D
⚠	R877	QRZ0077-560	56	1/4W	FUSIBLE	EBS
⚠	R877	QRZ0077-560	56	1/4W	FUSIBLE	F
⚠	R878	QRG022J-560A	56	2W	O.M.FILM	
⚠	R879	QRG022J-560A	56	2W	O.M.FILM	
⚠	R880	QRD125J-222	2.2K	1/2W	UNF.CARBON	
⚠	R881	QRG022J-560A	56	2W	O.M.FILM	D
⚠	R881	QRG022J-560A	56	2W	O.M.FILM	EBS
⚠	R881	QRG022J-560A	56	2W	O.M.FILM	F
⚠	R882	QRG022J-560A	56	2W	O.M.FILM	D
⚠	R882	QRG022J-560A	56	2W	O.M.FILM	EBS
⚠	R882	QRG022J-560A	56	2W	O.M.FILM	F
⚠	R883	QRG022J-121A	120	2W	O.M.FILM	A
⚠	R883	QRG022J-121A	120	2W	O.M.FILM	B
⚠	R883	QRG022J-121A	120	2W	O.M.FILM	C
⚠	R883	QRG022J-680A	68	2W	O.M.FILM	D
⚠	R883	QRG022J-680A	68	2W	O.M.FILM	EBS
⚠	R883	QRG022J-680A	68	2W	O.M.FILM	F
⚠	R884	QRG022J-121A	120	2W	O.M.FILM	A
⚠	R884	QRG022J-121A	120	2W	O.M.FILM	B
⚠	R884	QRG022J-121A	120	2W	O.M.FILM	C
⚠	R884	QRG022J-680A	68	2W	O.M.FILM	D
⚠	R884	QRG022J-680A	68	2W	O.M.FILM	EBS
⚠	R884	QRG022J-680A	68	2W	O.M.FILM	F
⚠	R885	QRG022J-560A	56	2W	O.M.FILM	
⚠	R886	QRG022J-560A	56	2W	O.M.FILM	D
⚠	R886	QRG022J-560A	56	2W	O.M.FILM	EBS
⚠	R886	QRG022J-560A	56	2W	O.M.FILM	F
⚠	R886	QRG022J-680A	68	2W	O.M.FILM	A
⚠	R886	QRG022J-680A	68	2W	O.M.FILM	B
⚠	R886	QRG022J-680A	68	2W	O.M.FILM	C
	R891	QRD167J-331	330	1/6W	CARBON	

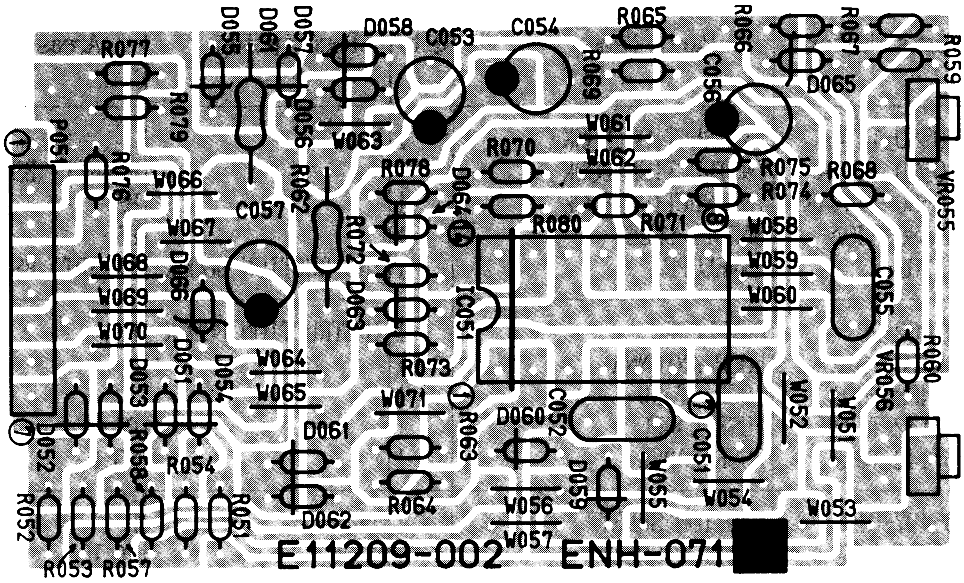
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-001	FUSE CLIP	
		EMG7331-001	FUSE CLIP	D
		EMG7331-001	FUSE CLIP	EBS
		EMG7331-001	FUSE CLIP	F
⚠		ETP1000-41EA	POWER TRANSFORMER	D
⚠		ETP1000-41EA	POWER TRANSFORMER	F
⚠		ETP1000-41EABS	POWER TRANSFORMER	EBS
⚠		ETP1000-41ZA	POWER TRANSFORMER	C
⚠		ETP1000-42JA	POWER TRANSFORMER	A
⚠		ETP1000-42JA	POWER TRANSFORMER	B
		E11609-003	CIRCUIT BOARD	A
		E11609-003	CIRCUIT BOARD	B
		E11609-003	CIRCUIT BOARD	C
		E11609-003	CIRCUIT BOARD	D
		E11609-003	CIRCUIT BOARD	F
		E11609-003BS	CIRCUIT BOARD	EBS
		E45524-002	FUSE CLIP	A
		E45524-002	FUSE CLIP	B
		E65508-002	TAB	
		E67132-T6R3	FUSE LABEL	C
		E67132-T6R3	FUSE LABEL	D
		E67132-T6R3	FUSE LABEL	EBS
		E67132-T6R3	FUSE LABEL	F
		E67764-102	WRAPPING TERMINAL	
		E67764-102	WRAPPING TERMINAL	C
		E67764-202	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E70859-001	EARTH PLATE	A
		E70859-001	EARTH PLATE	B
		E70945-H25B	HEAT SINK	A
		E70945-H25B	HEAT SINK	B
		E70945-H30B	HEAT SINK	C
		E70945-H30B	HEAT SINK	D
		E70945-H30B	HEAT SINK	EBS
		E70945-H30B	HEAT SINK	F
		E70945-H40B	HEAT SINK	C
⚠		QMC0437-002	AC OUTLET	C
⚠		QMC0440-001	AC OUTLET	A
⚠		QMC0440-001	AC OUTLET	B
		SBSB3012CC	SCREW	
		SBSB3012CC	SCREW	C
	P862	EMV7112-004	CONNECTOR	
	FW853	EWR35B-65KST	FLAT WIRE	
	FW861	EWR33B-16SST	FLAT WIRE	
	RY001	ESK1D12-113	RELAY	
	RY001	ESK1D12-113	RELAY	A
	RY001	ESK1D12-113	RELAY	B
	RY001	ESK1D12-113	RELAY	C
	RY001	ESK1D12-113	RELAY	D
	RY001	ESK1D12-113	RELAY	F
	RY001	ESK1D12-113BS	RELAY	EBS

⚠ : SAFETY PARTS

■ ENH-071 Impedance Unit PC Board Ass'y

Note: ENH-071 ☐ Varies according to the areas employed. See note (1) when placing an order.


D055
D061
D057
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C053
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R052
R051
R053
R057
E11209-002
ENH-071

Note (1)

PC Board Ass'y	Designated Areas
ENH-071 Ⓐ	Europe, West Germany, the U.K., Australia, U.S. Military Market, Other Countries
ENH-071 Ⓔ	the U.S.A., Canada

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC051	AN6912	I.C.	MATSUSHITA	

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D051	1SS133	SILICON	ROHM	A
	D052	1SS133	SILICON	ROHM	A
	D053	1SS133	SILICON	ROHM	A
	D054	1SS133	SILICON	ROHM	A
	D055	1SS147	SILICON	ROHM	
	D056	1SS147	SILICON	ROHM	
	D057	1SS147	SILICON	ROHM	
	D058	1SS147	SILICON	ROHM	
	D059	1SS133	SILICON	ROHM	A
	D060	1SS133	SILICON	ROHM	A
	D061	1SS133	SILICON	ROHM	A
	D062	1SS133	SILICON	ROHM	A
	D063	1SS133	SILICON	ROHM	
	D064	1SS133	SILICON	ROHM	
	D065	MTZ11C	ZENER	ROHM	
	D066	MTZ15JC	ZENER	ROHM	

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C051	QFN81HJ-103	0.01MF	50V	MYLAR	A
	C052	QFN81HJ-103	0.01MF	50V	MYLAR	A
	C053	QETB2AM-105	1MF	100V	ELECTRO	
	C054	QETB2AM-225	2.2MF	100V	ELECTRO	
	C055	QFN81HJ-103	0.01MF	50V	MYLAR	
	C056	QETB1EM-476	47MF	25V	ELECTRO	
	C057	QETB1HM-225	2.2MF	50V	ELECTRO	

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R051	QRD167J-473	47K	1/6W	CARBON	A
	R052	QRD167J-473	47K	1/6W	CARBON	A
	R053	QRD167J-473	47K	1/6W	CARBON	A
	R054	QRD167J-473	47K	1/6W	CARBON	A
	R057	QRD167J-472	4.7K	1/6W	CARBON	A
	R058	QRD167J-472	4.7K	1/6W	CARBON	A
	R059	QRD167J-272	2.7K	1/6W	CARBON	A
	R060	QRD167J-272	2.7K	1/6W	CARBON	A
⚠	R061	QRD145J-101S	100	1/4W	UNF.CARBON	
⚠	R062	QRD145J-101S	100	1/4W	UNF.CARBON	
	R063	QRD167J-153	15K	1/6W	CARBON	A
	R064	QRD167J-153	15K	1/6W	CARBON	A
	R065	QRD167J-223	22K	1/6W	CARBON	
	R066	QRD167J-563	56K	1/6W	CARBON	
	R067	QRD167J-473	47K	1/6W	CARBON	
	R068	QRD167J-153	15K	1/6W	CARBON	
	R069	QRD167J-823	82K	1/6W	CARBON	
	R070	QRD167J-271	270	1/6W	CARBON	
	R071	QRD167J-914	910K	1/6W	CARBON	
	R072	QRD167J-472	4.7K	1/6W	CARBON	
	R073	QRD167J-472	4.7K	1/6W	CARBON	
	R074	QRD167J-154	150K	1/6W	CARBON	
	R075	QRD167J-472	4.7K	1/6W	CARBON	
	R076	QRD167J-103	10K	1/6W	CARBON	
	R077	QRD167J-224	220K	1/6W	CARBON	
	R078	QRD167J-474	470K	1/6W	CARBON	
	R079	QRD167J-474	470K	1/6W	CARBON	
	R080	QRD167J-914	910K	1/6W	CARBON	
	VR055	QVPC603-472	4.7K	0.3W	VARIABLE	A
	VR056	QVPC603-472	4.7K	0.3W	VARIABLE	A

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11209-002	CIRCUIT BOARD	
	P051	EMV5101-007B	PLUG ASSY	

⚠ : SAFETY PARTS

Accessories List

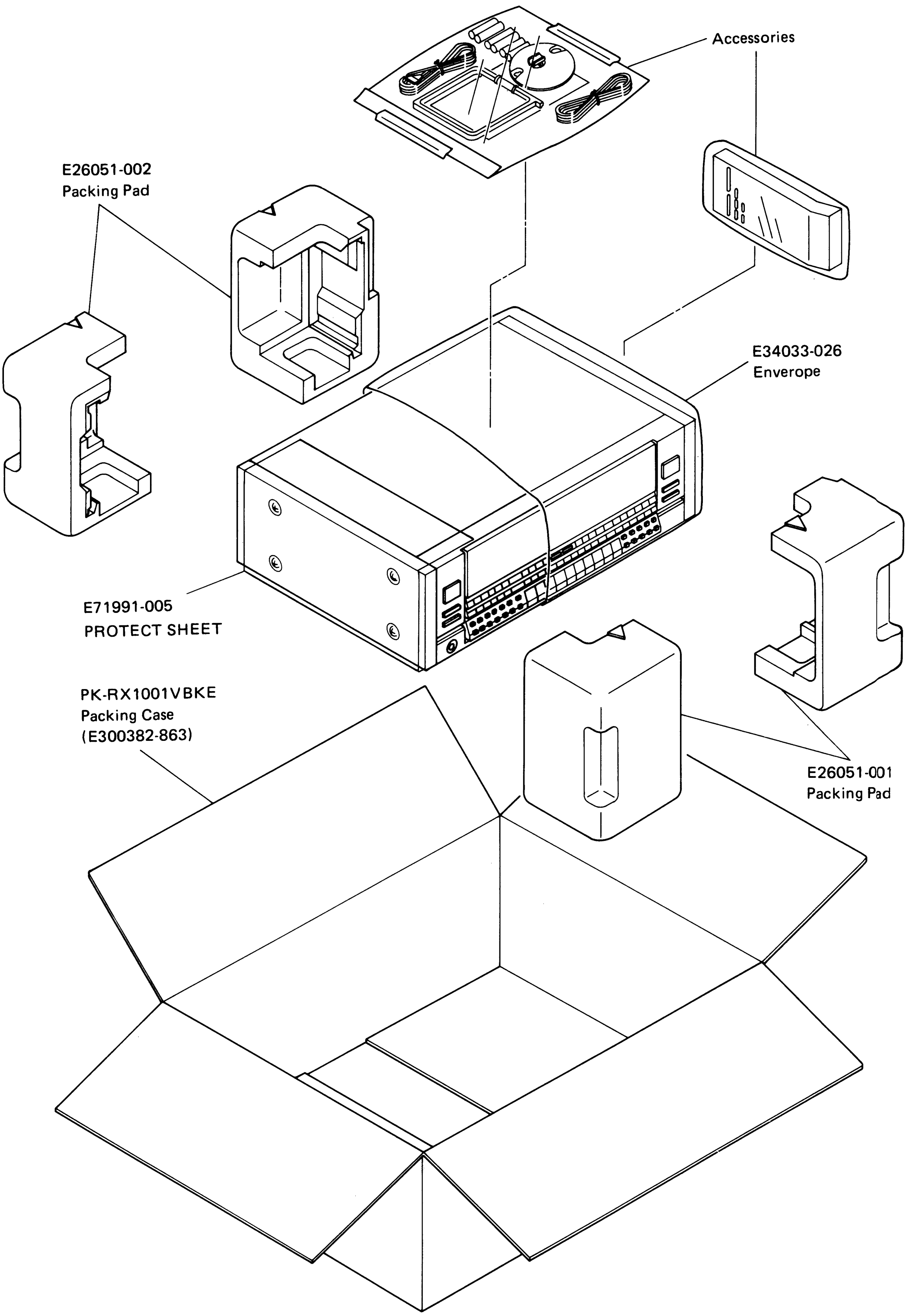
⚠	Parts Number	Parts Name	Q'ty	Description	Areas
	E30580-1474A	INSTRUCTION BOOK	1		J
	E30580-1443A	INSTRUCTION BOOK	1		EXCEPT BS,J
	E30580-1443ABS	INSTRUCTION BOOK	1		BS
	E43486-340A	SAFETY SHEET	1		BS
	E41202-2	ENVELOPE	1	INSTRUCTION BOOOK	EXCEPT BS
	E41202-2B	ENVELOPE	1	INSTRUCTION BOOOK	BS
	EQB4001-012	LOOP ANTENNA	1		
	E304084-001	LOOP STAND	1		
	E67142-T3R15	FUSE LABEL	1		P
	E67142-T6R3	FUSE LABEL	1		PG,U
	E35497-013	CAUTION SHEET	1	110V	P
	E35497-015	CAUTION SHEET	1	220V	PG,U
	EMZ2001-007	ADAPTER	1		E
	E6581-4	ENVELOPE	1		P,PG,U
	E03614-004	BUILT IN ANTENNA	1		EXCEPT G
	E67007-001	WIRE ANTENNA ASS'Y	1		G
	RM-SR1001	REMOTE CONTROL UNIT	1		
	AM4J-2PSA	BATTERY		3SET	
	E43486-165A	CAUTION SHEET	1		BS
	BT20025K	WARRANTY CARD	1		C
	BT20071A	SERVICE CENTRE LIST	1		C
	BT20029C	WARRANTY CARD	1		A
	BT20098	WARRANTY CARD	1	NEW ZEALAND	A
	BT20064A	WARRANTY CARD	1		G
	QZL1008-001	FTZ INFORMATION SEET	1		G
	BT20060	WARRANTY CARD	1		BS
	BT20066	EEC AGENCY	1		BS,G
	BT20044E	SAFETY INSTRUCTION SHEET	1		J
	BT20048B	WARRANTY CARD	1		J,P,PG
	BT20046C	SERVICE INFORMATION	1		J,P,PG
	E66416-003	ENVELOPE	1		J
⚠	E04056	SIEMENS PLUG	1		PG,U
⚠	EMC0201-001BS	AC PLUG	1		BS
⚠	QMF51A2-3R15S	FUSE	1		P
⚠	QMF51A2-6R3S	FUSE	1		PG,U

⚠ Safety parts

The Marks for Designated Areas

J·················the U.S.A.
C·················Canada
E·················Europe
A·················Australia
G·················West Germany
ES················Spain
BS················the U.K.
P,PG············U.S.Military Market
U·················Other Countries
No mark indicates all areas.

Packing Materials and Part Numbers


Accessories
E26051-002
Packing Pad
E34033-026
Enverope
E71991-005
PROTECT SHEET
PK-RX1001VBKE
Packing Case
(E300382-863)
E26051-001
Packing Pad